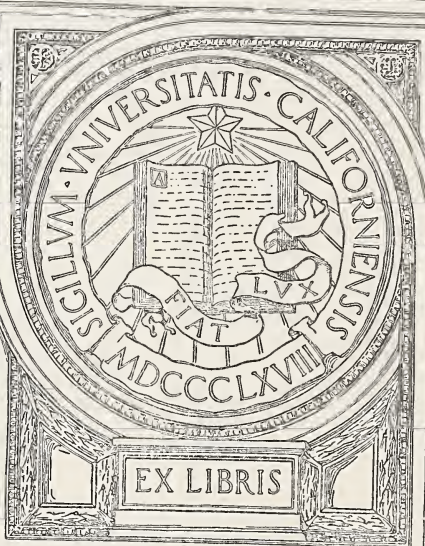




UNIVERSITY OF CALIFORNIA  
MEDICAL CENTER  
SAN FRANCISCO



EX LIBRIS

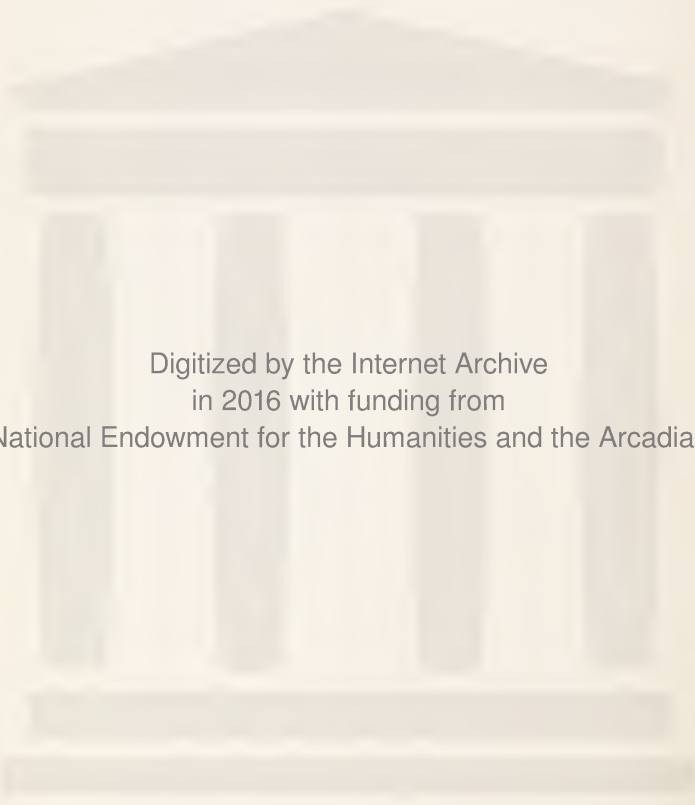












Digitized by the Internet Archive  
in 2016 with funding from  
The National Endowment for the Humanities and the Arcadia Fund

**NEW ORLEANS**  
**MEDICAL AND SURGICAL**  
**JOURNAL.**

---

**Index to Volume Fifty=Seven.**

---

**JULY, 1904,**

**TO**

**JUNE, 1905.**

---

**NEW ORLEANS:**  
The L. Graham Co., Ltd., 715-719 Perdido St.  
1905.





PAGING DUPLICATED  
No 5. P-289



# INDEX TO VOLUME FIFTY-SEVEN.

JULY 1904 TO JUNE 1905.\*

## A.

A Case of Volvulus .....	847
A Pectoralis Minimus Muscle—by S. P. Delaup, M. D.....	324
Acetozone in the Treatment of Summer Diarrhea.....	272
Achilles Tendon Reflex in the Tabes Dorsalis.....	694
Acid Sodium Phosphate and Adrenalin in Vesical Diseases.....	436
Action of Digitalis in Blood Pressure.....	540
Acute Aortitis, Sudden Death in.....	181
"Arthritis Deformans"—by R. M. Van Wart, M. D.....	155
Acute Pancreatitis; Necrosis; Retro-Peritoneal Suppuration; Operation—Recovery .....	846
Acute Parenchymatous Nephritis in Pregnancy; Puerperal Con- vulsions; Report of Cases—by D. L. Watson, M. D.....	411
Acute Suppurative Osteomyelitis; The Importance of Its Early Recog- nition and Treatment—by J. F. Oechsner, M. D.....	378
Acute Tetanus Cured by Intraneural Injections of Antitoxin.....	535
Address of the Incoming President of the Orleans Parish Medical Society, Dr. M. J. Magruder.....	662
Adherent Soft Palate, New Method of Treating.....	185
Administration of Antistreptococcic Serum.....	693
Adrenalin in Malignant Affections of the Throat.....	268
Adrenalin in Two Cardio-Pulmonary Cases.....	616
Air and Discipline in Tuberculosis—by C. H. Tebault, Jr., M. D.....	474
Allen, C. W., M. D., Report of Two Cases of Ambulatory Typhoid, etc	904
American Public Health Association.....	593
An Investigation into the Causation of Puerperal Infection.....	850
An Unusual Case of Meningitis—by E. L. McGehee, M. D.....	223
Anesthetic in Operations for Adenoid Vegetations.....	854
Annual Report of Dean—by S. E. Chaillé, M. D.....	867
Annual Report of President of Louisiana State Medical Society—by Dr. J. M. Barrier .....	89
Anti-Blennorrhagic Drugs in Gonorrheal Urethritis; the Question of Their Value—by A. Nelken, M. D.....	646
Antitoxin Treatment of Hay-Fever; Personal Observations in Prof. Dunbar's Laboratory—by O. Joachim, M. D.....	480
Aphasia and the Cerebral Zone of Speech.....	357
Arterial Pressure and Chloroform Absorption.....	778
Atlantic City Meeting of the American Medical Association— <i>Editorial</i> .....	73
Atrophic Rhinitis Treated with Acetozone.....	185
Attitude of the Medical Profession Towards Race Suicide and Crim- inal Abortion—by Louis G. LeBeuf, M. D. ....	3

## B.

Batchelor, J. M., M. D.—Some Remarks on the Treatment of Club- Foot by the Method of Lorenz.....	390
Undescended Testicle—Report of two Cases.....	509
Bechet, P. E., M. D., Report of a Severe Case of Membranous Croup, etc. ....	468

\*Owing to an error in printing, issues of October and November were paged alike. To avoid complications in this general Index we have attached the letter (b) to all paging of the November issue.



Bennett, F. C., M. D., A Case of Intestinal Obstruction .....	558
Beta-Naphtol in Uncinariasis—by E. M. Dupaquier, M. D.....	802
Bill to Increase the Efficiency of the Medical Department of the U. S. Army .....	(b) 358
Bordeaux Mixture— <i>Editorial</i> .....	259
Boykin, P. A., M. D., An Unusual Case of Retained Fetus, With Specimen .....	478
Briggs, J. R., M. D., Tubercular Adenitis and Hodgkin's Disease; Is the Etiology Identical?.....	638
Brometone for Epilepsy .....	778
Bruns, H. D., M. D., Removal of Lens in High Myopia.....	289
Ptosis and the Operation of Motais.....	879
C.	
Calcification of the Finer Cerebral Vessels.....	852
Calculation of Date of Delivery .....	929
Calomel in Rheumatic Fever .....	779
Cancer Theories— <i>Editorial</i> .....	431
Case of Retained Fetus, With Specimen—by P. A. Boykin, M. D....	478
Chaillé, S. E., M. D., Annual Report as Dean.....	867
Chancroid of Dorsum of Penis, etc., Cured by Grafting—by Jules Lazard, M. D.....	714
Chassaignac, Chas., M. D., Spinal Analgesia in Genito-Urinary and Rectal Operations .....	559
Chloroform Anesthesia—by A. Jacoby, M. D.....	26
Cholelithiasis, Diagnosis and Treatment—by J. A. Storck, M. D....	650
Chylous Cyst of the Mesentery.....	354
Cicatricial Stenosis of the Intestine of Tubercular Origin.....	845
Circular of Insanity, A Case of—by E. M. Hummel, M. D.....	(b) 303
Clark, S. M. D., M. D., Dysmenorrhea, A Plea for More Thorough Study of the Etiology, etc.....	130
Clinical Report on Eclampsia, With Treatment—by L. G. LeBeuf, M. D. ....	400
Clinical Study of Eclampsia .....	(b) 350
Coincidence of Tendency to Iodin Intoxication and Hyperacidity....	620
Collargol in Malignant Diphtheria .....	181
Colomb, B. A., M. D., Contract Medical Practice.....	459
Come to the Meeting— <i>Editorial</i> .....	845
Communications .....	71, 173, 349, 765
Complications of La Grippe—by J. B. Elliott, Jr., M. D.....	306
Contract Medical Practice—by B. A. Colomb, M. D.....	459
Contributions to the Symptomatology and Treatment of Exophthalmic Goitre .....	(b) 355
Correlation of Blindness and Usual Symptoms of Locomotor Ataxia .....	(b) 356
Correspondence .....	684, 688
Cypress Oil in Whooping Cough .....	267
D.	
Dacryocystitis—by R. F. Harrell, M. D.....	36
Damiana Discredited as a Drug— <i>Editorial</i> .....	174
Dangers of the Glass Catheter During Parturition .....	618
Danna, J. A., M. D., Fracture of the Patella; Report of five Cases....	891
Dechloridation by Digitalis and Theobromin.....	615
Definite Results Obtained from Removal of Lens in High Myopia....	269
Delaup, S. P., M. D., A Pectoralis Minimus Muscle.....	324
One Hundred Cases of Successful Spinal Cocainization.....	572

Dental Caries and Popular Fallacies—by George J. Friedrichs, M. D., D. D. S.....	318
Departments—	
Ear, Nose and Throat .....	185, 267, 354 (b), 437, 622, 780, 854
General Medicine .....	82, 181, 263, 355, 533, 615, 778, 853
General Surgery .....	79, 177, 260, 354, 773, 845
Nervous and Mental Diseases....	270, 357, 356 (b), 439, 537, 621 694, 851, 932
Obstetrics and Gynecology ...	77, 179, 261, 350 (b), 433, 530, 617, 692, 776, 848, 929
Ophthalmology .....	85, 183, 269, 355 (b), 438, 536, 855
Therapeutics ..	83, 182, 265, 352 (b), 434, 533, 619, 695, 777, 930
Diagnostic Import of the Sacro-Uterine Ligaments.....	433
Diagnostic Value of the Position of the Head in Cerebellar Diseases..	271
Differential Diagnosis of Neuritis .....	539
Diphtheritic Paralysis .....	(b) 356
Disadvantage of Commercial Hydrogen Peroxide as an Antiseptic for the Ear .....	437
Diseases of the Heart and Their Treatment; A Synopsis—by Otto Lerch, M. D.....	743
Dr. Bel Reappointed— <i>Editorial</i> .....	352
Dr. Finsen is Dead— <i>Editorial</i> .....	(b) 348
Dr. Shrady Retires from the <i>Record</i> — <i>Editorial</i> .....	353
Dr. William Osler— <i>Editorial</i> .....	259
Dosage in Radiotherapy .....	182
Ducoté, C. J., M. D., The Injustice which Physicians do Themselves in Too Frequently Prescribing Proprietary Medicine.....	644
Dunbar Antitoxin in Hay Fever .....	930
Dupaquier, E. M., M. D., Beta-Naphtol in Uncinariasis.....	802
Hypotensive Medication and Dechloridation.....	570
Dupuy, Homer, M. D., Upper Respiratory Tract as a Source of Sys- tematic Infection .....	719
Durel, W. J., M. D., Prophylaxis and Early Treatment of Pulmonary Tuberculosis .....	671
Dysentery, Toxin and Antitoxin.....	931
Dysmenorrhea, A Plea for a More Thorough Study of Its Etiology— by S. M. D. Clark, M. D.....	130
E.	
Editorial Department: Atlantic City Meeting of A. M. A.....	73
Bordeaux Mixture .....	259
Cancer Theories .....	431
Come to the Meeting .....	845
Damiana Discredited as a Drug .....	174
Dr. Bel Reappointed .....	352
Dr. Finsen is Dead .....	(b) 348
Dr. Shrady Retires from the <i>Record</i> .....	353
Dr. William Osler .....	259
Fifteenth International Medical Congress.....	257
Fourth of July and Tetanus .....	74
Glucose in Diabetes .....	258
Guard Fever Patients .....	176
Havana and the American Public Health Association.....	613
Improper Medical Advertisements .....	689
Louisiana State Medical Society .....	769
Low Mortality Rates in New Orleans.....	353
Malaria and Mosquitoes .....	352

Medical Department of the Army.....(b)	346
Medical Standards .....	528
Meeting of Louisiana State Medical Society.....	923
Monument to Walter Reed .....	75
National Provision for Leprosy .....	691
Orleans Parish Medical Society .....	529
Pan American Medical Congress .....	432, 611
Politics in Health Matters .....	844
Protection of the Medical Profession .....	690
Quack Advertisements .....	351
Restrictions for Proprietary Medicine.....	769
Sane Ethics Applied to Legislation.....	921
Sanitation on the Isthmus .....	610
The A. M. A. Meeting .....	844
"The Master Word in Medicine".....	771
The Medical Practice Act .....	175
The New Tulane .....	843
The New Tulane President .....	(b) 349
The Postoffice Department to the Rescue .....	175
The Scope of National Vital Statistics.....	429
Worthy Honors .....	923
Effective Internal Disinfection of the Biliary Passages.....	435
Eighth Decennial Revision of the Pharmacopeia of U. S. A.....(b)	352
Elliott, J. B. Jr., M. D., Complications of La Grippe.....	306
Myelogenous Leukemia, With Reports of a Case—X-Ray Results .....	513
Emanium .....	(b) 53
Empyema, Remarks on, by L. Sexton, M. D.....	52
Epilepsy and Eyestrain.....	184
Ergot for Shock .....	85
Etiologic Considerations of Retrodisplaced Uteri and Associated Symptoms—by N. A. Shlenker, M. D.....	912
Etiology and Prophylaxis of Appendicitis.....	354
Etiology of Acute Prostatic Inflammation and Suppuration, by G. Frank Lydston, M. D. ....	631
European Notes, by Dr. I. I. Lemann.....	684
Eustis, Allan C., M. D., Preliminary Note Upon a New Clinical Method as an Aid in Diagnosing Renal Impairment, Based on the Nitrogen Contents of the Blood .....	(b) 324
Rectal Alimentation .....	18
Volvulus of the Intestines Complicating Typhoid Fever.....	816
Evans, T. H., M. D., Paratyphoid, with Clinical Illustrations and Comment .....	(b) 289
Experiences with Iodoform.....	774
Extra-Uterine Pregnancy. Its Diagnosis. Report of Cases by Isaac Ivan Lemann, M. D.....	393
Extra-Uterine Pregnancy; Operation Before Rupture, by L. Perrilliat, M. D. ....	759
F	
Facial Spasms, Remarks on, with Report of a Rare Form, etc., by R. M. Van Wart, M. D.....	273
Feingold, M., M. D., Two Cases of Unilateral Sympatheticus Irritation in the Eye.....	46
Fifteenth International Medical Congress— <i>Editorial</i> .....	257
Fish, H. M., M. D., Why So Many Eyes Are Lost.....	465



Fluorescence in the Human Organism .....	930
Fourth of July and Tetanus.— <i>Editorial</i> .....	74
Fracture of the Patella; Report of Five Cases—by J. A. Danna, M. D.	891
Frequency of Multiple Sclerosis in Louisiana, by R. M. Van Wart, M. D. ....	549
Friedrichs, Geo. J., M. D., D. D. S., Dental Caries and Popular Falla- cies .....	318

## G.

Galloway, Chas., M. D., Pernicious Malarial Fever .....	564
Gangrene of the Tonsil .....	185
Gangrenous Pancreatitis, by O. L. Pothier, M. D.....	496
General Paralysis .....	853
Genu-Varum and Valgum Corrected by Osteotomy—by E. D. Martin M. D. ....	887
Gersuny's Subcutaneous Parraffin Injection, and Its Application in Gynecology .....	849
Gessner, H. B., M. D., Importance of Surgical Tuberculosis to the Gen- eral Practitioner .....	205
Matas Operation for Aneurism .....	729
Nerve Blocking to Prevent Amputation Shock; Illustrative Reports of Two High Amputations.....	419
Surgery of Arthritis Deformans.....	165
Tetanus Treated by Antitoxin.....	736
Glucose in Diabetes.— <i>Editorial</i> .....	258
Gonorrhea of the Eye, Treatment of.....	183
Gonorrhea in Women; Treatment with Yeast.....	535
Granger, Amedée, M. D., Report and Exhibition of Cases of Cancer Treated by Mercuric Cataphoresis .....	146
Gumma and Tabes .....	853
Guard Fever Patients.— <i>Editorial</i> .....	176
Gunshot Wound of Face, Resulting in the Complete Destruction of the Sight of Both Eyes, by O. O. Hamner, M. D.....	45
Guthrie, J. B., M. D., X-Ray Therapeutics of Surgical Tuberculosis...	210

## H.

Hamner, O. O., M. D., Gunshot Wound of Face Resulting in Com- plete Destruction of Both Eyes .....	45
Hanot's Disease, With Report of a Case, by J. D. Weis, M. D.....	826
Harrel, R. F., M. D., Dacryocystitis .....	36
Hay Fever, The Relief of.....	273
Havana and the American Public Health Association.— <i>Editorial</i> ....	613
High Frequency Applications as a Remedy for X-Ray Burns.....	539
Huhner, E. J., M. D., Surgical Tuberculosis from an Orthopedic Standpoint .....	214
Hume, Jos., M. D., Principles Underlying the Therapeutic Treatment of General Pyogenic Infections, etc.....	333
Hummel, E. M., M. D., A Case of Circular Insanity.....(b)	303
Puerperal Insanity .....	373
Some Salient Points in the Morbid Psychology of Maniacal State .....	797
Hydrochloric Acid as a Curative for Gout.....	265
Hyoscine Hydrobromate as a Preliminary to Ether Anesthesia.....	84
Hypotensive Medication and Dechloridation, by E. M. Dupaquier, M. D. ....	570
Hysterical Arthralgia or Brodie's Joint, A Case Of, by F. W. Parham, M. D. ....	805

## I.

Immunity Against Infection in Abdominal Surgery .....	260
Improper Medical Advertisements.— <i>Editorial</i> .....	689
In a Critical Review of the Treatment of Eclampsia.....	262
Increase in Albumin and Nitrogen in Stomach Content.....	620
Influenza. Its Complications and Sequelæ, with Treatment, by B. O. LeBlanc, M. D. ....	800
Insect Bite Icterus .....	777
Intestinal Obstruction, A Case of, by F. C. Bennett, M. D.....	558
Intestinal Origin of Tetanus.....	263
Intolerance of Breast Milk.....	616
Intra-Tracheal Goitre .....	267
Is the Mississippi a Source of Typhoid Infection in Louisiana?— <i>Communication</i> , by Dr. B. A. Colomb.....	765
Isolated Subcutaneous Rupture of the Pancreas.....	847

## J.

Jaboulay's Method of Treating Enuresis.....	779
Jacobi, A., M. D., Chloroform Anesthesia .....	26
Treatment of Tetanus .....	230
Joachim, O. M. D., The Anti-Toxin Treatment of Hay Fever. Personal Observations in Prof. Dunbar's Laboratory.....	480

## K.

King, A. C., M. D., Value of Axis Traction Forceps in Certain Conditions .....	124
King, Gordon, M. D., Some Manifestations of Influenza in the Ear and Upper Air Passages .....	489

## L.

Lachrymal Canal in Cataract Operations, Ligation of the.....	86
Landauer, S. C., M. D., Malarial Fever, Unusual Form.....	238
Lazard, Jules, M. D., Chancroid of Dorsum of Penis, etc., Cured by Grafting .....	714
LeBeuf, Louis G., M. D., Attitude of the Medical Profession Towards Race Suicide and Criminal Abortion.....	3
Clinical Report on Eclampsia, with Treatment.....	400
Trismus Nascentium Cured by Eserin Hypodermatically....	822
LeBlanc, B. O., M. D., Influenza; Its Complications and Sequelæ with Treatment .....	800
Lemann, I. I., M. D., Extra-Uterine Pregnancy; Its Diagnosis, Report of Cases .....	393
Lerch, Otto, M. D., Diseases of the Heart and Their Treatment; A Synopsis .....	743
Louisiana State Medical Society.— <i>Editorial</i> .....	769
Louisiana State Medical Society Notes. .87, 186, 274, 359, 362 (b), 440, 541, 697, 781, 856, 937	
Louisiana State Medical Society Proceedings....3, 124, 205, 306, 303 (b), 470, 644, 719	
Louisiana State Nurses' Association— <i>Communication</i> .....	173
Low Mortality Rates in New Orleans— <i>Editorial</i> .....	353
Lumbar Puncture and Cyto Diagnosis .....	621
Lumbar Puncture in the Treatment of Aural Vertigo.....	439
Lupus Treated by Local Applications of Turpentine.....	84
Lydston, G. Frank, M. D., An Interesting Case of Nephrectomy and Nephrolithotomy .....	203
Etiology of Acute Prostatic Inflammation and Suppuration..	631

## M.

Maes, Urban, M. D., Personal Observations With Nitrous Oxide and With Ether Anesthesia .....	61
Malaria and Mosquitoes— <i>Editorial</i> .....	352
Malarial Cystitis—by Robert Westphal, M. D.....	1
Malarial Fever, Unusual Form—by S. C. Landauer, M. D.....	238
Manifestations of Influenza in the Ear and Upper Air Passages— by Gordon King, M. D.....	489
Martin, E. D., M. D., Genu-Varum and Valgum, Corrected by Osteotomy .....	887
McGehee, E. L., M. D., An Unusual Case of Meningitis.....	223
Medical Department of the Army— <i>Editorial</i> .....	346
Medical News Items.....102, 193, 283, 367, 364 (b), 448, 542, 623, 703, 785, 860, 938	
Medical Practice Act— <i>Editorial</i> .....	175
Medical Standards— <i>Editorial</i> .....	528
Meeting of the Laboratory Section of the American Public Health Association .....	607
Membranous Croup, etc., Report of a Severe Case of—by P. E. Bechet, M. D.....	468
Ménage, H. E., M. D., Pruritus Considered from a General Standpoint .....	314 (b)
Mental Unsoundness and Mental Disease in a Local Prison.....	851
Mercury in Syphilis .....	356
Mesotan in Night Sweats.....	534
Metrorrhagia in a Girl Aged Fourteen Years.....	532
Miller C. J., M. D., Principles Underlying the Successful Treatment of Cystocele .....	470
Vaginal Cesarean Section, Report of a Case.....	551
Miscellaneous.....272, 358 (b), 495, 539	
Misuse of Tendon Transplantation.....	932
Monument to Walter Reed— <i>Editorial</i> .....	75
Mortuary Reports ..112, 202, 288, 374, 372 (b), 458, 630, 710, 792, 866, 952	
Multiple Sclerosis .....	694
Myelogenous Leukemia, With Report of a Case, X-Ray Results—by J. B. Elliott, Jr., M. D.....	513

## N.

National Provision for Leprosy— <i>Editorial</i> .....	691
Nelken, A., M. D., Antiblennorrhagic Drugs in Gonorrheal Urethritis; the Question of their Value.....	646
Neoplasm of the Larynx Successfully Treated With X-Ray.....	268
Nephrectomy and Nephrolithotomy, An Interesting Case Of—by G. Frank Lydston, M. D.....	203
Nerve Blocking to Prevent Amputation Shock; Illustrative Reports of Two High Amputations—by H. B. Gessner, M. D.....	419
Nervous Insomnia and Morphinism Cured by Dionin and Veronal... 533	
Nervous Lesions Produced by Atheromatous Arteries.....	851
New Clinical Method as an Aid in Diagnosing Renal Impairment, Based on the Nitrogen Content of the Blood; A Preliminary Note Upon a—by A. C. Eustis, M. D. ....(b)	324
New General Hospital of Mexico City— <i>Communication</i> —by Dr. L. G. LeBeuf .....	767
New Remedy in Aphthae.....	931
New Theory of Transmission of Sympathetic Ophthalmia.....	855
Nitrous Oxide and With Ether Anesthesia, Personal Observation With—by Urban Maes, M. D.....	61

## O.

Occipito-Posterior Positions of the Vertex.....	(b) 351
Oechsner, J. F., M. D., Acute Suppurative Osteo-Myelitis: The Importance of Its Early Recognition and Treatment.....	378
Rational Treatment of Splinters in the Foot.....	169
On Some Relations of Medicine and Surgery to Jurisprudence.....	688
On What Lines is the Treatment of Malignant Diseases Advancing?..	773
Operation for Carcinoma Uteri in Germany.....	530
Operative Treatment for Senile Hypertrophy of the Prostate.....	273
Optic Neuritis .....	439
Optic Neuritis in Infectious Diseases .....	272
Orleans Parish Medical Society— <i>Editorial</i> .....	529
Orleans Parish Medical Society Notes.....	101, 441, 702, 938
Orleans Parish Medical Society Proceedings ....	52, 155, 223, 333, 324 (b), 400, 496, 662, 729, 805, 891
Oxytocic Action of Sugar .....	533

## P.

Pan-American Medical Congress .....	579
Pan-American Medical Congress— <i>Editorial</i> .....	432, 579
Paraldehyde Delirium and the Effects of Paraldehyde, With Remarks Upon Other Hypnotics .....	271
Paralytic Chorea .....	357
Paratyphoid; With Clinical Illustrations and Comment—by T. H. Evans, M. D.....	(b) 289
Patellar Reflexes in Hysteria .....	272
Pathological Anatomy of Acute Infantile Poliomyelitis.....	537
Peripheral Nerve Paralysis and Plexus Paralysis in the Uper Extremity .....	538
Pernicious Malarial Fever—by Charles Galloway, M. D.....	564
Peripheral Optic Neuritis, Surgical Treatment of.....	86
Perrilliat, L., M. D., Extra-Uterine Pregnancy; Operation Before Rupture .....	759
Petroleum in the Treatment of Ozena.....	622
Phototherapy in Ear Diseases .....	(b) 354
Plasmodium Malariae Outside the Body of Man, and the Experiments, With Deductions—by C. D. Simmons, M. D.....	793
Pleurisy in the Course of Typhoid Fever.....	355
Pneumonia—by T. A. Roy, M. D.,.....	886
Politics in Health Matters— <i>Editorial</i> .....	844
Postoffice Department to the Rescue— <i>Editorial</i> .....	175
Pothier, O. L., M. D., Gangrenous Pancreatitis.....	496
Pre and Post Operative Treatment of Surgical Cases—by L. Sexton, M. D .....	500
Principles Underlying the Therapeutic Treatment of General Pyogenic Infections, etc—by Joseph Hume, M. D.....	333
Prophylaxis and Early Treatment of Pulmonary Tuberculosis—by W. J. Durel, M. D.....	671
Protection of the Medical Profession— <i>Editorial</i> .....	690
Pruritus Considered from a General Standpoint—by H. E. Ménage, M. D. ....	(b) 314
Psychosis During Pregnancy; Rendering Abortion Necessary.....	358
Ptosis and the Operatoion of Motais—by H. D. Bruns, M. D.....	879
Publications Received ....	110, 200, 287, 373, 370 (b), 457, 546, 627, 708, 791, 864, 950
Puerperal Eclampsia Treated by Thyroid Extract.....	261
Puerperal Infection, Remarks on.....	179
Puerperal Insanity—by E. M. Hummel, M. D.....	373



## Q.

Quack Advertisements— <i>Editorial</i> .....	351
Quinin and Sodium Salicylate in Puerperal Fever.....	777

## R.

Rectal Alimentation—by Allan C. Eustis, M. D.....	18
Relation of Asthma to Nose Disease .....	780
Removal of Lens in High Myopia—by H. D. Bruns, M. D.....	289
Renal Decapsulation .....	79
Report and Exhibition of Cases of Cancer Treated by Mercuric Cataphoresis—by Amedée Granger, M. D.....	146
Report of Unique Case of Destruction of Both Eyes by a Stray Bullet from a Pistol—by F. M. Thornhill, M. D.....	44
Report of Successful Removal of Carcinoma, With Some General Facts Pertaining Thereto—by Luther Sexton, M. D.....	344
Report of Committee on Legislation.....	933
Report of Two Cases of Ambulatory Typhoid, with Perforation—by C. W. Allen, M. D.....	904
Restrictions of Proprietary Medicine— <i>Editorial</i> .....	769

## S.

Sane Ethics Applied to Legislation— <i>Editorial</i> .....	921
Sanitation on the Isthmus— <i>Editorial</i> .....	610
Section on Quarantine—by J. N. Thomas, M. D.....	325
Serum Treatment of Leprosy .....	(b) 352
Sexton, L., M. D., Empyema, Remarks On.....	52
Pre and Post-Operative Treatment of Surgical Cases.....	500
Report of Successful Removal of Carcinoma, With Some General Facts Pertaining Thereto.....	344
Shlenker, M. A., M. D., Etiologic Consideration of Retrodisplaced Uteri and Their Associated Symptoms.....	912
Should We Operate Upon Cystic Ovaries?.....	263
Silver Nitrate Injections in the Treatment of Phthisis.....	266
Simmons, C. D., M. D., Plasmodium Malariae Outside the Body of Man, and the Experiments, With Deductions.....	893
Some Remarks on the Treatment of Club Foot by the Method of Lorenz—by J. M. Batchelor, M. D.....	390
Some Salient Points in the Morbid Psychology of Maniacal States—by E. M. Hummel, M. D.....	797
Spinal Analgesia in Genito-Urinary and Rectal Operations—by Chas. Chassaignac, M. D.....	559
Splinters in the Foot, Rational Treatment of—by J. F. Oechsner, M. D. ....	169
Static Machines and Humidity— <i>Communication</i> —from Amedée Granger, M. D. ....	71
Sterility in Women .....	180
Storck, J. A., M. D., Cholelithiasis, Diagnosis and Treatment.....	650
Successful Spinal Cocainization, One Hundred Cases of—by S. P. Delaup, M. D.....	572
Successful Treatment of Cystocele—by C. J. Miller, M. D.....	470
Sugar to Combat the Emaciation of Neuropaths.....	619
Summer Diarrhea of Infants—by Louis M. Warfield, M. D.....	113
Suppression of Salt in Treatment of Hyperchlorohydric Dyspepsia....	83
Suprarenal Gland in Gynecology.....	77
Surgery of Arthritis Deformans—by H. B. Gessner, M. D.....	165
Surgical Tuberculosis from an Orthopedic Standpoint—by E. J. Huhner, M. D.....	214

Surgical Tuberculosis, Importance of, to the General Practitioner— Herman B. Gessner, M. D.....	205
Sympathetic Ophthalmia, Treatment of.....	85
Sympathetic Ophthalmitis .....	86

## T.

Tebault, C. H., Jr., M. D., Fresh Air and Discipline in the Treatment of Pulmonary Tuberculosis .....	474
Tetanus Complicating Typhoid Fever .....	264
Tetanus Successfully Treated by Antitoxin—by H. B. Gessner, M. D. ....	736
Tetanus Treated by Epidural Injections.....	264
The A. M. A. Meeting at Portland— <i>Editorial</i> .....	844
The Golden Mean of Truth—Address Before the Orleans Parish Medical Society—Dr. E. B. Craighead.....	667
The Influence of Hysteropexy On Pregnancy.....	617
The Injustice Which Physicians Do Themselves and Their Patients in Too Frequently Prescribing Proprietary Medicine—by C. J. Ducoté, M. D.....	644
The Matas Operation for Aneurism—by H. B. Gessner, M. D.....	729
The New Tulane— <i>Editorial</i> .....	843
The New Tulane President— <i>Editorial</i> .....(b)	349
The Scope of National Vital Statistics— <i>Editorial</i> .....	429
Therapeutic Paralysis—by William F. Waugh, M. D.....	711
Therapeutic Uses of Scopolamine.....	619
Thomas, J. N., M. D., Section on Quarantine.....	325
Thornhill, F. M., M. D., Report of a Unique Case of Destruction of Both Eyes by a Stray Bullet from a Pistol.....	44
Three Attacks of Eclampsia Occurring in a Multipara.....	776
Toast to the Medical Press—by Mr. M. Picard.....	917
Treatment of Carcinoma Cervicis Uteri in Advanced Stages.....	692
Treatment of General Paresis, and of Other Toxic and Infectious Psychoses With Salt Infusion .....	270
Treatment of Hemorrhages of the Skin and Mucous Membranes With PENGHAWAR .....	427
Treatment of Pathologic Face and Brow Presentations.....	848
Treatment of Tetanus—by A. Jacoby, M. D.....	230
Tremor Associated with Mercurial Poisoning.....	
Trismus Nascentium Cured by Eserin Hypodermatically—by L. G. LeBeuf, M. D. ....	822
Trypanosoma, A Note On—by R. M. Van Wart, M. D.....	163
Tubercular Adenitis and Hodgkin's Disease; Is the Etiology Identical? —by J. R. Briggs, M. D.....	638
Typhoid Fever, Notes On.....	82
Typhoid Perforation, Diagnosis and Operative Treatment of.....	177

## U.

Ultimate Results of Induced Labor for Minor Degrees of Pelvic Con- traction .....	531
Ultimate Results of Anterior Utero-Vaginal Incisions.....	693
Uncinariasis, The Blood in—by Joseph D. Weis, M. D.....	245
Undescended Testicle, Report of Two Cases—by J. M. Batchelor, M. D. ....	509
Unilateral Sympatheticus Irritation in the Eye, Two Cases of—by M. Feingold, M. D. ....	46
Unna's Mixed Treatment of Leprosy .....	777
Unusual Case of Parosmia .....	185
Upper Respiratory Tract as a Source of Systematic Infection—by Homer Dupuy, M. D.....	719



Urinary Analysis in Pregnancy, With Special Reference to Eclampsia..	78
Use of Sodium Chloride After An Application of Silver Nitrate.....	434
Use of Yohimbin in Rhino-Laryngology.....(b)	355

## V.

Vaginal Cesarean Section for Placenta Previa.....	433
Vaginal Cesarean Section; Report of a Case—by C. J. Miller, M. D...	551
Value of Axis Traction Forceps in Certain Conditions—by A. C. King, M. D. ....	124
Value of Tuberculin .....	695
Van Wart, R. M., M. D., Arthritis Deformans.....	155
Facial Spasm .....	723
Frequency of Multiple Sclerosis in Louisiana.....	549
Note on Trypanosoma.....	163
Veronal Habit .....	440
Violet Rays in Diseases of the Larynx.....(b)	354
Volvulus of the Intestines, Complicating Typhoid Fever—by A. C. Eustis, M. D.....	816
Vomiting of Food, A Hint to Prevent.....	616

## W.

Water Before Administering Chloroform, The Use of.....	779
Warfield, Louis M., M. D., Summer Diarrhea of Infants.....	113
Watson, D. L., M. D., Acute Parenchymatous Nephritis in Pregnancy, Puerperal Convulsions, Report of Cases.....	411
Waugh, Wm. F., M. D., Therapeutic Paralysis.....	711
Weis, J. D., M. D., Hanot's Disease, With Report of a Case.....	826
The Blood in Uncinariasis.....	245
Westphal, Robert, M. D., Malarial Cystitis.....	I
Why So Many Eyes Are Lost—by H. M. Fish, M. D.....	465
Within What Limits Does Enucleation Protect from Sympathetic Ophthalmitis? .....	438
Wood Alcohol Poisoning .....	536

## X.

X-Ray Therapeutics of Surgical Tuberculosis—by J. B. Guthrie, M. D.	210
---	-----

---

## BOOKS REVIEWED IN VOLUME LVII.

---

A Laboratory Manual of Human Anatomy—BAKER.....	790
A Manual of Experimental Physiology—HALL.....	455
American Illustrated Medical Dictionary—DORLAND.....	200
American Year Book of Medicine and Surgery—SAUNDERS.....	108
Analysis of the Sexual Impulse—Love and Pain—The Sexual Impulse in Women—Studies in the Psychology of Sex—ELLIS.....	286
Anatomy—HALE .....	790
Anatomy and Diseases of the Eye and Ear—ROOSA-DAIRS.....	706
Art of Compounding—SCOVILLE.....	863
Atlas and Epitome of General Pathologic Histology—DURCK.....	109
Atlas and Epitome of Operative Gynecology—SCHAEFFER-WEBSTER..	789
Bacteriology and the Public Health—NEWMAN.....	

Bacteriology in Milk and Its Products—CONN.....	(b) 370
Beauty Through Hygiene—WALKER.....	456
Blood-Pressure as Affecting Heart, Brain, Kidneys and General Circulation—BISHOP.....	455
Case Teaching and Surgery—BURRELL-BLAKE.....	943
Clinical Lectures and Essays on Abdominal and Other Subjects—ROLLESTON.....	790
Commoner Diseases of the Eye—WOOD-WOODRUFF.....	109
Compend of the Practice of Medicine—HUGHES-BROWN.....	947
Diseases of the Eye—FOX.....	108
Diseases of the Eye—MAY.....	950
Diseases of the Intestines and Peritoneum—NOTHNAGEL-ROLLESTON.....	285
Diseases of the Nervous System, Lectures On—GOWERS.....	109
Diseases of the Nose, Throat and Ear—BISHOP.....	455
Diseases of the Rectum, Anus and Sigmoid Flexure—MATHEWS.....	286
Enlargement of the Prostate—MOULLIN.....	707
Epilepsy and Its Treatment—SPRATLING.....	863
Eye, Ear, Nose and Throat Nursing—DAVIS-DOUGLAS.....	944
Four Epochs of Woman's Life—GALBRAITH.....	949
Hand-Book of Diseases of the Eye and Their Treatment—SWANZY.....	626
Hand-Book of Ophthalmic Science and Practice—JULER.....	626
Hand-Book of Physiology—HALLIBURTON.....	706
Hand-Book of Surgery for Students and Practitioners—GRIFFITH.....	943
How to Study Literature—HEYDRICK.....	790
In the Year 1800—KELLEY.....	790
International Clinics—KELLY.....	372
International Medical Annual—TREAT.....	198
Internal Secretions and the Principles of Medicine—SAJOUS.....	198
Lectures on the Bio-chemistry of Muscle and Nerve—HALLIBURTON.....	863
Lectures to General Practitioners on the Diseases of the Stomach and Intestines—REED.....	453
Life Insurance Examinations—SYMONS.....	948
Manual of Clinical Diagnosis by Means of Microscopical and Chemical Methods—SIMON.....	545
Manual of Fever Nursing—WILKIN.....	
Manual of Personal Hygiene—PYLE.....	789
Manual of Materia Medica and Pharmacy—MUIR.....	287
Manual of Operative Surgery—BINNIE.....	790
Manual of Personal Hygiene—PYLE.....	789
Medical Diagnosis, Special Diagnosis of Internal Medicine—LEUBE.....	545
Medical Epitome Series. Diseases of the Eye and Ear—GRIFFIN.....	950
Medical Epitome Series—Nervous and Mental Diseases—LEA-NAGELL.....	456
Medical Epitome Series. Surgery—MAGEE-JOHNSON.....	944
Medical Examination for Life Insurance—GREEN.....	947
Medical Laboratory Methods—FRENCH.....	944
Medical Latin—ST. CLAIR.....	944
Medical News Pocket Formulary—THORNTON.....	200
Medical News Visiting List—LEA.....	454
Modern Ophthalmology—BALL.....	946
Mother's Manual—COOLIDGE.....	949
Non-Surgical Treatise on Diseases of the Prostate Gland and Adnexa—OVERALL.....	454
Normal Histology—DUNHAM.....	455
Normal Histology and Microscopical Anatomy—FERGUSON.....	949
Nurses' Hand-Book of Obstetrics—COOKE.....	863
Obstetric and Gynecologic Nursing—DAVIS.....	198
Pain and Its Indications—HILL.....	627
Perpetual Visiting List and Pocket Reference Book—DIOS.....	373

Physicians' Pocket Account Book—TAYLOR.....	454
Physicians' Visiting List for 1905—BLAKISTON.....	455
Physiological Economy in Nutrition With Special Reference to the Minimal Proteid Requirement of the Healthy Man—CHITTEN- DEN .....	705
Physiological Feeding of Infants—PRITCHARD.....	945
Practical Dietetics With Reference to Diet in Disease—PATTEE.....	788
Practical Electro-Therapeutics—GOTTSCHALK.....	456
Practical Gynecology—MONTGOMERY.....	107
Practical Medicine Series of Year Books.....	108, 197, 199, 453, 545
Practical Treatise on Genito-Urinary and Venereal Diseases—TAYLOR..	454
Practical Treatise on Nervous Diseases—PEARCE.....	109
Practical Treatise on Nervous Exhaustion—(Neurathia)—BEARD- ROCKWELL .....	864
Principles and Practice of Gynecology—DUDLEY.....	546
Principles and Practice of Surgery—VAUGHAN.....	108
Progressive Medicine—HARE-LANDIS.....	946
Qualitative Analysis Brief—MEMMINGER.....	454
Reference Hand Book of the Medical Sciences, Vol. VIII.—BUCK....	455
Refraction and How to Refract—THORINGTON.....	946
Roentgen Ray Diagnosis and Therapy—BECK.....	199
Social Diseases and Marriage—MORROW.....	285
Strabismus or Squint—VALK.....	946
Summer Diarrhea of Infants—ILLOWAY.....	945
Surgery of the Heart and Lungs—RICKETS.....(b)	368
Surgical Treatment of Bright's Disease—EDEBOHLS.....	943
System of Practical Surgery—BERGMANN-BRUNS-MIKULICZ.....	942
Text-Book of Alkaloidal Therapeutics—WAUGH-ABBOTT.....	945
Text-Book of Clinical Diagnosis by Laboratory Methods—BOSTON.(b)	369
Text-Book of Diseases of Women—HIRST.....	
Text-Book of Human Physiology—BRUBACKER.....(b)	369
Text-Book of Human Physiology, Including Histology and Microscop- ical Anatomy—LANDOIS.....	789
Text-Book of Insanity—KRAFFT-EBING.....	864
Text-Book of Obstetrics—HIRST.....	862
Text-Book of Physiological Chemistry for Students of Medicine and Physicians—SIMON.....(b)	369
Text-Book of Physiology—OTT.....	372
Text-Book of Practical Therapeutics—HARE.....	788
The Doctor's Leisure Hour, Vol. I. of the Doctor's Recreation Series— DAVIES .....	373
The Doctor's Red Lamp, Vol. II. of the Doctor's Recreation Series— MOULTON .....	373
Toxicology—DWIGHT .....	453
Transactions, American Roentgen Ray Society.....	947
Treatise on Bright's Disease and Diabetes—TYSON.....	707
Treatise on Medical Diagnosis—MUSSEY.....	199
Tuberculosis and Acute General Miliary Tuberculosis—CORNET- JAMES .....	372
Surgical Asepsis—PALMER.....	373
Visiting and Pocket Reference Book for 1905.....	454

# CONTRIBUTORS OF ORIGINAL ARTICLES IN VOLUME LVII.

---

- |                              |                            |
|------------------------------|----------------------------|
| ALLEN, C. W., M. D.          | JOACHIM, -O., M. D.        |
| BATCHELOR, J. M., M. D.      | KING, A. C., M. D.         |
| BECHET, P. E., M. D.         | KING, GORDON M. D.         |
| BENNETT, F. C., M. D.        | LANDAUER, S. C., M. D.     |
| BOYKIN, P. A., M. D.         | LAZARD, JULES, M. D.       |
| BRIGGS, J. R., M. D.         | LEBEUF, L. G., M. D.       |
| BRUNS, H. D., M. D.          | LEBLANC, B. O., M. D.      |
| CHAILLÉ, S. E., A. M., M. D. | LEMANN, I. I., M. D.       |
| CHASSAIGNAC, CHAS., M. D.    | LERCH, OTTO, M. D.         |
| CLARK, S. M. D., M. D.       | LYDSTON, G. F., M. D.      |
| COLOMB, B. C., M. D.         | MCGEHEE, SR., E. L., M. D. |
| DANNA, J. A., M. D.          | MAES, URBAN, M. D.         |
| DELAUP, S. P., M. D.         | MARTIN, E. D., M. D.       |
| DUHOTÉ, J. C., M. D.         | MÉNAGE, H. E., M. D.       |
| DUPAQUIER, E. M., M. D.      | MILLER, C. J., M. D.       |
| DUPUY, H., M. D.             | NELKEN, A., M. D.          |
| DUREL, W. J., M. D.          | OECHSNER, J. F., M. D.,    |
| ELLIOTT, JR., J. B., M. D.   | PARHAM, F. W., M. D.       |
| EUSTIS, A. C., M. D.         | PERRILLIAT, L., M. D.      |
| EVANS, T. H., M. D.          | POTHIER, O. L., M. D.      |
| FEINGOLD, M., M. D.          | SEXTON, L., M. D.          |
| FISH, H. M., M. D.           | SHLENKER, M. A., M. D.     |
| FRIEDRICHS, G. J., M. D.     | SIMMONS, C. D., M. D.      |
| GALLOWAY, CHAS., M. D.       | STORCK, J. A., M. D.       |
| GESSNER, H. B., M. D.        | TEBAULT, JR., C. H., M. D. |
| GRANGER, A., M. D.           | THOMAS, J. N., M. D.       |
| GUTHRIE, J. B., M. D.        | THORNHILL, F. M., M. D.    |
| HAMNER, O. O., M. D.         | VAN WART, R. M., M. D.     |
| HARRELL, R. F., M. D.        | WARFIELD, L. M., M. D.,    |
| HUHNER, E. J., M. D.         | WATSON, D. L., M. D.       |
| HUME, J., M. D.              | WAUGH, W. F., M. D.        |
| HUMMEL, E. M., M. D.         | WEIS, J. D., M. D.         |
| JACOBY, A., M. D.            | WESTPHAL, ROBERT, M. D.    |



# *New Orleans Medical and Surgical Journal.*

---

VOL. LVII.

JULY, 1904.

No. 1.

---

## Original Article.

---

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints may be had at reasonable rates if a WRITTEN order for the same accompany the paper.]

---

### Malarial Cystitis.\*

By ROBERT WESTPHAL, M. D., Yorktown, Texas.

Though probably all present know that during malarial infection we may have pharyngitis, laryngitis, bronchitis, gastritis, colitis, enteritis, hepatitis and nephritis, it has not yet been adequately proven that these inflammations were due to the malarial infection *per se*, or even that the presence of the parasites in great numbers in the dilated smaller blood vessels of these inflamed areas constituted a most important factor in the production of the inflammation by lessening the tissue resistance to other pathogenic parasites. To establish this truth is of prime importance in our considerations of malarial infection and its manifestations.

According to Osler, in the comatose form of pernicious malaria, "the especial localization of the infection is in the brain where actual thrombi of parasites with marked secondary changes in the

---

\*Read before the Texas State Medical Association, Austin, April, 1904.

surrounding tissue have been found." This condition may be found even when no parasites had been demonstratable in the peripheral circulation before death.

In the algid form, to again quote from Osler, "Marchiafava has shown that the gastro-intestinal mucosa is often the seat of a spinal invasion by the parasites, actual thrombosis of the small vessels with superficial ulceration and necrosis occurring."

In the hemoglobinuric form Shropshire\* states that "Ewing reports the examination of kidneys after death in one case and he said he was unable to find or demonstrate the parasite in the peripheral circulation, but at autopsy the kidney capillaries were found to be filled with them." And then Shropshire goes on to say that, "In every case at autopsy in the pernicious form the parasites are found in the spleen and the brain in the comatose forms, and stomach and intestines in the choleric or enteric forms."

Now then, I wish to report a case of cystitis in which in my opinion the presence of the malarial parasite in large numbers in the blood vessels of the bladder-walls was a cause, if not the only cause.

It is the case of a woman of about 36 years of age, white, married, mother of two children. Of large stature, weighing about 170 pounds. Said she had always been in good health. No history of malaria.

Three or four days previous to the time when I was called she noticed that she had to urinate more frequently than commonly, and that the act was painful and accompanied by straining. She also noticed that the urine was turbid and bloody, the blood being mostly in clots mixed with mucus. She had no menstrual discharge at the time. When I was called the naked eye appearance of the urine had changed in so far that it did not appear bloody any more. Otherwise the condition was aggravated. She complained of backache, pain over the region of the bladder, appetite impaired, felt bad generally. On examination found her temperature to be about 99.5°, pulse slightly accelerated, tongue coated, pain and tenderness on pressure over the pubic region, and, on deep pressure, tenderness extending upwards on both sides along the course of the ureters. Otherwise examination proved negative. On examining

---

\*Journal A. M. A., Vol. XLI., No. 10, P. 606.

the urine I found it to be pale, turbid, of a specific gravity of 1020, acid reaction. On testing the filtered urine for albumen I found only a trace; no sugar. The sediment obtained by the centrifuge examined microscopically showed besides epithelium, etc., a great many leucocytes, staphylococci and red blood corpuscles, and in many of the latter the hematozoa of malaria, and alive at that. In a stained specimen of the sediment at least half of the erythrocytes were found to be infected.

I put her on capsules containing quininæ sulph. gr. III, salolis gr. I. One capsule every three hours. Besides I gave her  $7\frac{1}{2}$  grs. of urotropin four times a day and a teaspoonful of a lithia and sorghum compound every four hours.

Two days later I made another examination of her urine. Found it less turbid, still containing a good many leucocytes, but no staphylococci nor erythrocytes. Kept her on the same treatment except that I gave her the lithia and sorghum only three times a day. She reported herself well in a few days.

I had another case almost exactly like this except that it was in an old woman (past 60) and that she had had an acute attack of remittent fever about three months previous.

---

---

## Louisiana State Medical Society Proceedings.

[EDITED BY PUBLICATION COMMITTEE.]

I. I. Lemann, M. D., Chairman.

---

### The Attitude of the Medical Profession Towards Race Suicide and Criminal Abortion.

By DR. LOUIS G. LEBEUF, New Orleans, First Vice President Louisiana State Medical Society; Visiting Physician to Charity Hospital, New Orleans.

Our attitude on this question is the same in our profession from the mouth of the Rio Grande to the mouth of the Danube, that is to say throughout the civilized world, and, though few of us have even read the Hippocratic oath, we all live up consistently to the letter and spirit of its teachings, on this subject. Still, when we have condemned and endeavored to arrest race

suicide and criminal abortion we have not done our whole duty. Our mission is a higher one still, our education, our training, our studies, our whole life's preparation for the care of man's body, makes us also altruistic students of mankind, morally and sociologically. It is then as humanitarians, that we can do most good.

We already have the confidence of our patients, they know that we have at heart their best interests, we are in thorough sympathy with all their joys and sufferings. For the friendships of the bedside are indeed the true friendships of life. No set of men are ever thrown in a more intimate and confidential relation to one another than are physician and patient. It is as the adviser of the family circle, as the highest exponent always of moderation or the choice of the middle course in all matters of health and moral life, that we exert most influence. No more persistent apostle of the Golden Rule exists than the doctor; and his labor goes through the ages in a large serried army of silent workers, without the clarion voice of publicity, without self gratulation, ever the consistent minister of the body's ailments as well as the adviser in all matters of prophylaxis, even to the worst moral cankers of society.

A magnificent fight has been kept up in latter years by the lay press, and most undoubtedly a great deal of good has been accomplished by their expose of this subject; their condemnation has been most marked and we acknowledge the importance of their influence on the public mind. A strenuous president of a great republic has also recently given expression to some characteristic words of energetic censure, and this has appeared first in the preface of a book and frequently also we are told by newspapers as substantial encouragements to the mothers of large families. And still the agitation of such a subject in the public press is not unmixed with some harm and danger, I mean danger to a certain class, to the morbidly inclined, to those whose appetite and love of the sensational are always looking for all such questions and for all such writings on sexology, on criminal abortion or the intimate relations of man and woman to the progress of race increase. In a desire to satiate some salacious morbidity or some improper feelings they misunderstand the end in view, and lose sight of the importance and seriousness of the subject. This campaign of condemnation and education should come from our



body, and if we are not competent to give figures, and to advise, then let us quickly inform ourselves upon this matter to be able to keep up a winning fight.

A little over a century ago an Anglican minister started some erroneous theories on race increase. The Malthusian era, as it was called from him, was built upon an absolutely cold blooded deduction of mistaken comparison between the race increase and the slower increase of blood supply. Though it was an untenable, misconceived philosophy, it had a wonderful influence and sowed seeds of danger and harm which we probably feel to this day. In India, in parts of China and in many of the East India islands the destruction of the third or fifth or tenth child became often a painful and revolting necessity. The land was encompassed by the sea, or its limit of production had been reached for a given amount of population, and prevention as well as abortion was legalized. They also tried to limit fecundity by allowing the marriage of their women only after 36 years of age. But this is not the case in this broad land of ours, and we still have plenty of elbow room, and the fertility of our soil and the undeveloped resources of our country are tremendous. But in spite of that, statistics show us that we have reduced our race productiveness from 8 children per family to 2.1 inside of one hundred years. Is it not time to attempt to study this subject and try to stop this frightful calamity, by looking for the cause, and by applying some treatment or correction to the evil?

Juvenal, in his wonderful Satires, says: "Few children are born in the gilded bed, to the wealthy dame, so many artifices has she, and so many drugs to render women sterile, and destroy life within the womb." It was my good fortune some years ago to visit that wonderful city of the dead, under the shadow of Vesuvius, and after seeing many curious things there, the most interesting of them all to the sociologic critic specially, was undoubtedly the true insight one gets of the manners and customs of that buried world of over 18 centuries ago. The statues, the *bas-reliefs*, and wall paintings unearthed daily by the spade of the archaeologist tell us of the past, tell us of its vulgarity, of its immorality, of the crudeness in man's daily intercourse. This was caused by the high point of civilization attained by the wealthy class, surrounded

as it seemed to have been, with all the luxuries which their position as masters of the world gave them. They were more than beasts in their moral life. If Pompeii deserved its fate, if the rain of pumice and ashes, and the wave of lava were merely an avenging Creator showing His displeasure, if great Rome itself and its ruin was ordained by fate, then let these experiences be the voice of warning to us. Let the modern American Golgotha which has advanced with such rapid strides along this line of destruction, look to itself before it be too late. Wealth, luxury, ambition and selfishness, mixed with many imported customs and manners, were the cause of lessening the fertility of the women of all times. Still the same influences are at work; they once caused the destruction of a mighty Empire. They also caused the partial paralysis of a powerful sister republic, which fortunately for its future amongst nations, has lately studied this question so thoroughly, that the efforts of its Government have been successful, within a few years, to improve this status. To-day this question threatens us, and after a complete thorough research of the most reliable private and public statistics, we must admit, that our population has not increased in the last few decades, but on the contrary would decrease if it were not for our large immigration and the great fecundity of the first generation of the foreign born citizens of this country. And this is the task, this the influence and evil we must try to correct.

The course of civilization and the blight of the fin de siecle, is the crime against nature. The absolute determination to curtail the size of the family circle by methods of prevention, and that failing, by the crime against another being. In prevention, man sins against society, against himself, he is willing to sacrifice his neighbor's welfare and the future of his country to his own little narrow misguided interests. None of us can place ourselves on a higher plane than our neighbor, we can only condemn and attempt to inform ourselves of the dangers lurking in this practice, but we can not judge. However, the voice of experience of our profession teaches us, that prevention is always an unnatural state, leaving ever, in whatsoever form it is used, some pathologic results to the principals in the act, either physically or in the deteriorating psychic effect in the abstract on the mental condition of the participants, i. e., in durability of affection

influenced by the perversion of the *viae naturales*, which have been abused. When we come to think of the second cause of the curtailment of race expansion; the destruction of the foetus proper, it is then a very different matter. Outside of the laws of the land, which protect the living as well as the unborn, is there not something further that cries out for the innocent soul defenceless and unprotected swimming in its thin weak fetal membranes? The law of fair play, the manly cry of honor against the heinousness of Crime?

But in spite of all this the parents can not resign themselves to put aside a few luxuries and comforts they were accustomed to before their marriage. They are fond of dressing well, they have contracted expensive habits, they have the Opera, the Teas, the Concerts; the husband has his clubs, his cigars, his friends, his little game of cards, some of the pleasures would have to be sacrificed. The woman can not afford to lose her good looks by too frequent child bearing, she must retain her long, narrow dissimulative drop waist, she has her golf sticks, she has some other athletics, or probably her class of Volapuk would look down upon her if she consented to so common-place a thing as child bearing. She will get into a fever though, if her fashionable friend starts a list or a "Charade" to reclaim some Chinese waifs in a far away mission. The husband, well, he is no better, probably he is worse, because he is the one who suggests the *modus operandi* or the nefarious practices. What is it to them in their selfishness to lose a child or two? They have carried the soul of their soul, the blood of their blood as innocent holocausts on the altar of sacrifice to their vanity, pride and selfishness.

From 1884 to 1898 the rate of child births in Austria has been reduced from 39.7 per 1000 in number, to 36.2. In England from 33.6 to 29.4, in France from 24.8 to 22.1, in the United States (native Americans) from 17 to 14 per 1000. The rate of foreign born Americans is 37.5. This difference speaks for itself. In Europe the individual fecundity shows four or five children to each marriage, in America a little over two children to each family. The birth rate of the foreign born is even greater here than this, for during the first generation of life in this country, it is affected undoubtedly by pleasanter and happier surroundings,—by more comforts and less restraints. They produce

one or two children more per family than they did even in Europe. Unfortunately though it takes them only one generation to reach the low standard and same level of the native born Americans. The fecundity of American women has gone on diminishing to an astounding extent, and in spite of the high state of the practice of obstetrics and gynecology, in spite of aseptic medicine and the universal practice of better midwifery by the younger practitioners, the more familiar use of the forceps, the knowledge we have to-day of symphyseotomy and aseptic Cæsarean section, without mentioning the better control of eclampsia, placenta prævia, and the management of the newborn. Still Benjamin Franklin, writing a little over a century ago, shows us that the ratio of children in the average New England family to have been eight. Genealogical Records of the 17th century show six children to each family. Sadler reports between 1750 and 1780, and of 18th century, 5.2 per family. This was exceeded only in New South Wales, 5.4. Twenty per cent of American women are barren, 24 per cent of the higher classes, 27 per cent of the college girls' *alumnæ*.

Our population would be at standstill, if it was not for our immigration, and the prolificity of the foreign born. The tremendous increase of the negro population also help to increase our birth rate, though the removal of the protecting influence of slavery will be felt in the next generation or two, in diminishing that good record. For in spite of a marvellous fecundity, their shiftlessness and improvident nature have made them also the greatest death rate in the world.

In the parishes of south Louisiana the Acadian element of French origin has also a large proportion of children, and compares even favorably with the *habitant* of Franco-Canadian origin who have 9 or 10 children per family. Still-births and abortions are increasing in America, specially in our large cities. In Europe the thing which swells out the number of abortions, is the enormous prevalence of illegitimacy, and the larger proportion of these births. Statistics show 7 or 8% of each 100 deliveries to be illegitimate. The lack of proper maternal sentiment is the cause of the larger death rate of illegitimate infants. In the decreasing fecundity we realize the deteriorating influences of what is called refinement, and civilization; with the poorer class it is the fear



of poverty, and the difficulty of the times. Whatever the motive this is the place for the high minded physician to attempt his influence, and his warning against this glaring desire to limitation and criminal thirst for destruction. Let us tell them of the harm they do, let us inform them of the crime performed, and try and explain that humanity is not a cereal nor a plant, which can be limited and destroyed as we limit our cotton or corn acreage to protect the market. We are shocked at the law of Talmud or some decree of Confucius, which allows in over crowded districts, the legal sacrifice of the young or the feeding of crocodiles of the Ganges with their tenth born, and still we elbow daily the abortionists in our circles, and how often our offices are entered by them with the unblushing request for *Help, help!* as they call it! They are only a few days behind, or a few weeks, and it is probably a little cold or a little delay! Let our young practitioners beware of this snare, let him be very careful that he does not also incriminate himself. I sometimes believe that half of the women who appeal to us are not aware of the crime they offer us to commit. In the street they can not afford to see a little waif dog suffer without shuddering, but they will commit murder without compunction. I know of a case recently where a married woman of excellent family approached a physician to help her out of her trouble because she and her husband contemplated a tour through Europe, and she could not afford to remain pregnant. I was recently told by a married woman of an adjoining city, that she, together with twenty of her intimates, consisting of the most selected members of the 400 of that city, used a special infallible preventive known to them, and they restricted their family successfully to one or two children. In the Government mortuary statistics of 1902, I notice that the State of Louisiana is credited with only two registered cases of abortion in 1900, while in my own practice alone within five or six weeks, I know of at least five cases where external mechanical means were used to induce abortion. Two of the cases died, one had an hysterectomy performed on account of septicemia and acute peritonitis. This last case told me how the midwife who had dilated her uterus, used a black dirty, rusty *pincers*, as she called the dilator, to stretch her womb. She had to submit to that procedure five times before a hemorrhage was started or before she became very sick. In this case the

abortion was never produced, and she died without having succeeded in her intent. In two cases, where I was called, after the foetus was expelled, to treat the fever of infection and to check the hemorrhage, I knew the patients to be old offenders, so I refused to attend unless the names and addresses of the operators were furnished me. I secured the names and addresses of two of these. The information was given most unwillingly, but I refused to treat the patients otherwise. I called on the Board of Health, and Board of Medical Examiners, but of course the law does not allow any chances of successful prosecution, as I well knew before.

J. L. Casper an eminent student of Jurisprudence recently said: "Of all the many accused, never a one was condemned, and in no one case was the crime proven." The laws in Louisiana are about the same on this subject as in all the other states, very rigid if you can get a conviction. They are nearly identical in England, France, and Germany, only a little more strict in these last two countries. A physician who attends a case can not give anything but direct testimony of the objective symptoms of his patient, as he found her. The history given to him by his patient is excluded in his testimony, because that is hearsay evidence and not admissible in criminal cases. The woman herself when *supcœnaed* can always refuse to testify, because, as a *particeps criminis*, she is not forced to testify against herself. In one way only can this be corrected, according to the opinion of one of the most efficient District Attorneys New Orleans ever had, and that would be, to draw up a constitutional amendment which would have to be voted upon at a general State election, like the law governing the taking of a bribe, which would specifically assert that the giving of evidence of the principal in this crime would not be held against her. I have here added a copy of the statutes with the outline of the plan suggested.

Very naturally every one shrinks from taking any part in the prosecution of these cases, we are not only afraid of the unpleasant notoriety of having one's name connected with such matter, but besides, we hear of so few cases which have been successfully convicted and punished, that the reluctance to go into the case is pardonable. Still we should discuss these matters more than we

have done heretofore, recognizing the responsibility we owe society in the premises, and also attempt to check this nefarious practice.

If I am so unfortunate as to be called again to such cases, I intend in the light of the experience which I have gained, to write out a certificate which I will get the patient to sign before I agree to attend to her. This certificate will, 1st. Exculpate me from responsibility; 2nd. Be a confession of the crime; 3rd. State by whom it was committed, where, and when. Then finally I shall have this properly witnessed, and shall keep it until after her recovery. If she refuses then, to prosecute, I shall return it to her or destroy it in her presence. On the other hand in case of her death I shall turn that confession over to the District Attorney's office. If these notes have been a little dry, and tiresome, I merely wish to ask to be forgiven in consideration of the million of slaughtered human beings which Society has lost, on account of the heinousness of the crime, and the moral degeneracy which seems to be extending over this country with the frightful results which statistical records seem to portend.

*Bibliography—North American Review.*

*The Popular Science Monthly.*

*Journal of American Medical Association.*

*Philadelphia Medical Journal.*

*Boston Medical and Surgical Journal*—Geo. W. Engelmann.

*Texas Medical Journal*—J. P. Oliver.

"Facts Regarding Criminal Abortion"—*Journal American Medical Association*—Lewis.

"The Pathology of Criminal Abortion"—*Journal American Medical Association*—Herzog.

Larousse's Dictionnaire Universel.

## ADDENDA.

### 1. LAW AND MODIFICATIONS.

This is the present statute governing this Crime:

#### PROCURING PREMATURE DELIVERY OR ABORTION.

Whoever shall feloniously administer, or cause to be administered, any drug, potion, or any other thing, to any woman for the purpose of procuring a premature delivery, and whoever shall administer or cause to be administered to any woman pregnant

with child, any drug, potion, or any other thing, for the purpose of procuring abortion or a premature delivery, or whoever by any means whatsoever shall feloniously procure abortion or premature delivery, shall be imprisoned at hard labor for not less than one or more than ten years (As amended by Act 24, 1888, p. 18). Art. 18. Constitution and Revised Laws of Louisiana. Vol 1.

Our law of incriminating oneself by the evidence testified, could be modified to read like this, e. g.:

WHERE BRIBERY IS CHARGED, PERSONS NOT EXCUSED FROM TESTIFYING BECAUSE IT MAY INCRIMINATE THEM.

Art. 184. Any person may be compelled to testify in any lawful proceeding against any one who may be charged with having committed the offense of bribery, and shall not be permitted to withhold his testimony, upon the ground that it may incriminate him or subject him to public infamy; but such testimony shall not afterwards be used against him in any judicial proceedings, except for perjury in giving such testimony.



## 2. STATISTICAL TABLES.

TABLE I.—FECUNDITY AND MISCARRIAGE.

OBSERVER.	LOCALITY.	CLASS.	Number of Married Women	Sterility	Fecundity Number of chil- dren born to each Marriage	Number of mis- carriages to each married couple	Total Conceptions	Proportion of Abortions to labor at term	Proportion of the adult marri- ageable female
				Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.
AMERICANS.									
Engelmann, 1880-90	St. Louis.....	Laboring class .....	648	20.4	2.08	.74	2.8	2.8	2.8
Engelmann, 1890-92	St. Louis.....	Laboring class .....	804	21.2	2.1	.73	2.8	2.8	2.9
Engelmann, 1880-90	St. Louis.....	Higher class Americans, American parents .....	228	23.6	1.8	.65	2.5	2.5	2.77
Engelmann .....	St. Louis.....	Higher class Americans, German parents.....	114	26.3	1.9	.63	2.5	2.5	3.03
Chadwick .....	Boston .....	Laboring class, American-Irish parents...	334	27.2	1.9	.63	2.5	2.5	3.06
Chadwick .....	Boston .....	Americans, American parents .....	874	23.2	1.7	.64	2.38	2.38	2.7
Wilbur, 1894 .....	Michigan .....	All .....	Census	.....	1.8	.....	.....	.....	.....
Wilbur, 1870-94 .....	Michigan .....	All .....	Census	.....	2.1	.....	.....	.....	.....
Wright, 1885 .....	.....	College women .....	705	33.7	1.3	.....	.....	.....	.....
Smith, 1900 .....	.....	College women .....	343	20.5	1.8	.....	.....	.....	.....
Smith, 1900 .....	.....	Non-College women .....	313	15.7	2.1	.....	.....	.....	.....
IRISH.									
Engelmann .....	St. Louis.....	Laboring class .....	118	17.0	4.2	.96	.....	5.1	4.3
Chadwick .....	Boston .....	.....	754	.....	3.0	.77	.....	3.8	4.1
Wilbur .....	Michigan .....	Census .....	.....	.....	5.1	.....	.....	.....	.....
Kuczynski .....	Massachusetts .....	Census .....	.....	11.7	3.2	.....	.....	.....	.....

TABLE I.—FECUNDITY AND MISCARRIAGE. (Continued.)

OBSERVER.	LOCALITY.	CLASS.	Number of Married Women	Sterility	Fecundity Number of chil- dren born to each Marriage	Number of mis- carriages to each married couple	Total Conceptions	Proportion of Abortions to labor at term	Proportion of children born to the adult marri- ageable female
				Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.
GERMAN.	Engelmann .....	St. Louis .....	188	17.0	3.5	.95	4.4	.....	3.6
	Wilbur .....	Michigan .....	.....	.....	6.7	.....	.....	.....	.....
	Kuczynski .....	Massachusetts .....	.....	11.2	3.0	.....	.....	.....	.....
	Mayer .....	Berlin .....	5,195	17.2	3.2	.....	.....	.....	.....
ENGLISH.	Chadwick .....	Boston .....	113	.....	2.6	.84	3.5	.....	3.3
	Engelmann .....	St. Louis .....	51	41.0	2.5	1.18	3.7	.....	2.1
	Wilbur .....	Michigan .....	.....	.....	4.5	.....	.....	.....	.....
	Kuczynski .....	Massachusetts .....	.....	14.4	2.7	.....	.....	.....	.....
	*Whitehead .....	Manchester, 2000 .....	.....	.....	4.34	.61	4.95	.....	.....
NEGRO.	Engelmann .....	St. Louis .....	197	24.3	1.9	.7	2.6	.....	2.7

\*These figures should be somewhat less, as they indicate the number of children and miscarriages to the childbearing women and not to all married women; the number of miscarriages seems too small; on the contrary, as I am convinced that correct answers were not given, and for these records we must rely on the veracity of the patient.

TABLE II.

FECUNDITY IN THE AMERICAN COLONIES AND THE UNITED STATES  
IN THE SEVENTEENTH AND EIGHTEENTH CENTURIES.

OBSERVER.	LOCALITY.	DATE.	No. of Children to the Married Couple.	No. of Marriages.
Engelmann....	From genealogical records	1600-1650	6.7	146
Engelmann....	From genealogical records	1650-1700	6.1	392
Engelmann...	From genealogical records	1700-1750	6.6	503
Engelmann....	From genealogical records	1750-1800	6.1	784
Engelmann....	From genealogical records	1800-1850	4.6	213
Engelmann....	Portsmouth .....	1804-1811	4.27	.....
Engelmann....	Hingham .....	1726-1779	4.32	521
Engelmann....	Salem .....	1727-1781	4.55	.....
Sadler.....	United States .....	1750-1780	5.22	.....
Sadler.....	New York State.....	1750-1780	5.22	.....
Holyoke.....	Hingham .....	1782	4.5	Sickly Year.
Holyoke.....	Hingham .....	1783	4.6	Healthy Year.
Franklin .....	United States .....	.....	8.0	Vague.

TABLE III.

MEANS AND EXTREMES OF STERILITY, FECUNDITY,  
MISCARRIAGE AND DIVORCE.

	Generally Accepted Average.	Most Favorable Conditions now Existing.	American Colonies Eighteenth Century.	United States at the close of the Nineteenth Century.
STERILITY .....	11%	2.5% (Norway)	2%	General Average 20% to 23%
(Per cent. of childless marriages)				
FECUNDITY .....	4.5:1 (Europe)	7.5:1 (Canadian-French) 7.2:1 (Kaluga Department) 6.4:1 (Christiania)	4½:1	1.8 (College graduates 1.6)
(Number of children to the marriage)				
MISCARRIAGE .....	1.5:5	.....	.....	1:2.8
(Ratio of abortion to full-term labors)				
DIVORCE .....	.....	1:63,000 (Canada) 1:11,000 (England)	.....	1:185 (United States) 1:18.7 (Massachusetts) 1:8.2 (Rhode Island)
(Ratio of divorce to marriage)				

## DISCUSSION.

DR. CHAS. CHASSAIGNAC, of New Orleans: I believe the points are very well taken throughout, but we will have to admit that the correction of the evil will be exceedingly difficult because these are sins of civilization and as soon as the people become more knowing these things grow. There is something which refers, I think, to that subject directly where the medical man can do a little more; while it is not contributing to race suicide directly, it is indirectly; perhaps in as great proportion it does have its influence, and that is the effect of disease. I am free to say that probably a large proportion of the diminution in the reproduction of our race is due to the limiting effects of venereal disease. I need only mention syphilis, because it is generally known and has long been known as a factor; it is entirely superfluous to more than mention it, but another factor has only comparatively recently been studied, and that is the effect of gonorrhea.

There is no doubt that a large proportion of sterility is due to gonorrhea not only in the male, but especially, perhaps, through the effect on the unfortunate and virtuous female who is infected innocently on her part by one to whom she looks for support and protection, that is her husband. We know that often he is nearly as innocent as she is; this is due also in a great part to the physician. There is no doubt that many who are told they can marry, should not, and they not only make invalids of their wives, but make them sterile on account of disease of the uterus and adnexa.

I realize, of course, that this is not the time to go into this subject extensively, and will cease with merely this hint, but I believe it is in line in great part with the paper that has been read, and while giving my endorsement to all that the essayist has said, I think we can do a great deal by making sure that patients afflicted with venereal diseases are properly treated, and seeing that they do not affect the health of another being through our carelessness.

DR. C. J. DUCOTE, of Cottonport: I have listened to this paper with great pleasure, and I consider the contribution of great value. I have also listened to Dr. Chassaingnac's remarks with much interest. It seems to me however, that both speakers omitted one of the main points, that is the mechanical means employed to prevent conception. In these modern days women do not like the idea of being burdened with large families. It has become very



fashionable for them to have a limited number of children, and very frequently mechanical means are employed to prevent conception.

DR. T. S. DABNEY, of New Orleans. This subject has engrossed the attention of the people and scholars all the way back prior to the Christian Era. We find that it was a German who first appreciated the law, which has only recently been discovered, the law which shows that in countries from which a steady emigration goes on, the birth rate increases, but in those receiving a large immigration, the birth rate among the native-born decreases. The German law was that every male child born in a certain year should migrate. France has never been a successful colonizer, but Germany is the modern colonizer, and we find the German birth rate keeping up. If our new colonies in the Philippines and elsewhere furnish a field for American settlement, our birth rate will increase. If there were not prevention one way or another the families would be exceedingly large. According to a law of nature, a woman should always either be carrying a child in her womb or at her breast between the time of her first menstrual period and the menopause. We might therefore reasonably expect the average family to be between ten and twenty children. I am very much in favor of such a law as Dr. LeBeuf suggests. The real problem is not so much an increase in the birth rate, as in stopping the fearful infant mortality, a mortality truly appalling in the working classes.

DR. D. L. WATSON, of New Orleans. I agree with Dr. Ducote that conception is frequently prevented by mechanical means. It is a fact that women object to having babies, and the husbands object with them, and there are many who have not the moral conception of what they do. It occurs among all stations of life, among the rich and poor alike, there is a great deal of criminal abortion, and they do it simply because they do not want to have babies.

### **Rectal Alimentation.**

By ALLEN C. EUSTIS, B. S., Ph. B., M. D., New Orleans, Assistant Demonstrator of Chemistry, Medical Department of Tulane University; Visiting Physician to Charity Hospital.

In presenting the subject of rectal alimentation, I realize that the entire field has been well covered by many writers, such as Kousmal, Leube, Rosenthal and others, but the apparent disfavor

into which this method of feeding has fallen, especially in this section, has made me feel that I am justified in repeating perhaps many facts observed by other writers.

Prior to taking up a consideration of the subject matter proper, it may not be amiss to consider the anatomy and physiology of the parts concerned therewith. As is well known, the rectum receives its blood supply from three main sources; from the superior hemorrhoidal artery, which is a branch of the superior mesenteric artery, from the middle hemorrhoidal artery which is a branch of the internal iliac, and from the inferior hemorrhoidal, which is a branch of the internal pudic. In addition, the sacra media and the sciatic, and in the female, the vaginal also send branches to the lower portion of the rectum. The veins follow the course of the arteries, and it is self-evident that the blood from the upper portion only of this organ enters the portal circulation. Bearing these fundamental anatomical facts in mind, we can readily understand the importance of introducing all nutrient enemata well up into the colon.

As regards the absorption of the several foodstuffs from the rectum, we know that there are no digestive ferments in the rectum, and in order to have any digestion of these substances, we must either introduce the several digestive ferments along with the enema, or digest the enema previous to introduction. I am well aware that Ewald (1) recommends simple enemata of well beaten eggs, and that he was able to keep dogs in a state of nitrogenous equilibrium by this method, but as opposed to his teachings we have the experiments of Chittenden and others. Chittenden (2) claims that while the native proteids may be absorbed by the rectum the natural process for the absorption of the albumins is after they have undergone a hydrolytic cleavage, and that it is doubtful whether they can be utilized for any length of time without some harm. J. C. Lehman (3) demonstrated that large amounts of egg albumin given to a dog in enemata causes albuminuria.

Now let us consider what takes place when we ingest proteids by the mouth. The proteid molecule is subjected to a hydrolytic cleavage by the digestive juices and, without mentioning the many other substances which are formed, albumoses and peptone are formed in large amounts. These substances are toxic, true, but



before they are taken up by the system they are subjected to a change. As demonstrated by Chittenden (3), the epithelial cells of the intestinal mucous membrane have the power of converting these toxic substances back into albumin to be utilized by the tissues. Summing up the results of numerous metabolism experiments on dogs, he says: "In fact the results obtained favor the view that the proteoses (albumoses) weight for weight, possess a higher nutritive value than fresh beef" (4). Furthermore, according to Reach (6) who experimented upon dogs by ligating portions of the intestines, gelatin solutions are much less readily absorbed by the large intestine than is a solution of albumose. Addition of salt to the extent of 0.7% makes the gelatin equal the albumose in solubility. However, we must not lose sight of the fact that not only must the respective foodstuff be absorbed, but it must be assimilable by the tissues.

Pflüger (5) has proven that in order for fats to be absorbed by the intestinal mucosa, they must first be split up into fatty acid and glycerin. This is exactly what happens when we introduce a pancreatic juice along with the enema. Starches have no nutritive value when given by the rectum, unless predigested, and although there is no inverting enzyme in the rectum, as pointed out by Markwald (12), cane sugar has a certain food value on account of the ease with which the bacteria present in the rectum can effect inversion. Glucose is readily taken up by the rectum and colon and is utilized by the tissues, but as claimed by Ewald (7), we cannot employ it in stronger than twenty per cent solutions, owing to its irritant effects.

It is claimed by some practitioners that so-called nutritive enemata have very little food value, but that their main virtue rests in the great amount of water which they contain. However, what are the clinical facts?

Wright (8) in the *Lancet*, reports a case of a man with carcinoma of the stomach who was unable to take any nourishment by the mouth and was getting progressively weaker. He was given nutrient enemata of peptonized beef, and as a result he was able to get out of bed, living in fairly good health for three months longer. Robinson (9) fed a patient of his, exclusively by enemata for two weeks, and was able to effect a cure of gastric ulcer thereby.

M. Deremberg (10) reports two cases treated exclusively by

nutrient enemata, consisting of peptonized meat, eggs and bread. The first case was that of a man fifty-three years of age with a stricture of the oesophagus, who was unable to swallow. Before he started to feed him by rectum he was in a very weakened condition and was passing only four grammes of urea per day. On the enemata he was able to get around in fairly good health for fourteen months, while his excretion of urea went up to 15-20 grammes per day. His second case was that of a young man with a tubercular laryngitis, who was also unable to swallow. He placed this second patient upon the same treatment and he gained in weight, notwithstanding the disease with which he was suffering, and passed an average of seventeen grammes of urea per day. Lepine (11) had three cases of hyperchloridia which he treated exclusively with nutrient enemata consisting of salted bouillon (150 gms.), which is nothing but a solution of gelatin, the yellow of two eggs and a little sugar, but all of these lost weight. After reviewing the literature upon the subject and from his own experience, Lepine concluded that it was necessary to predigest nutrient enemata. Flint (15) reports having kept a patient alive by rectal alimentation for five years. With this short review of the subject it must be evident that nutritive enemata, when properly employed, have a great utility. What are the objections to this form of nourishing other than from the patient's standpoint? They are very few in number, but it might be well to mention some. Curtin (13) mentions a carpenter, who, wishing to take an enema, attached the rubber tube of a fountain syringe to the faucet of a bath-tub. He was seized with violent cramps in the abdomen and died very shortly with all the symptoms of peritonitis. The post-mortem examination showed a perforation of an old ulcer at the lower end of the sigmoid. Further, certain exanthemata are apt to occur after enemata, but these seldom last long (14).

My own experience with nutrient enemata is confined to the post-operative treatment of twenty-three laparotomies performed by Dr. E. S. Lewis, assisted by Dr. I. I. Lemann and Dr. C. N. Chavigny, to whose service I was assigned at the time. All of these patients were nourished exclusively by nutrient enemata for from thirty-six to forty-eight hours, and in some cases for seventy-two hours. The enemata consisted of brandy  $\frac{1}{2}$  oz., Tr. Opii 5.

minims, and peptonized milk 4 oz. Occasionally the white of an egg was added. They were given every four hours, and to each alternate one were added eight ounces of normal salt solution. I was struck by the fact that with very few exceptions these patients complained very little of thirst and of hunger, and we resorted to very little stimulation.

Another case in which I used the same enemata was one of my own, in which there was a carcinoma of the pylorus very far advanced. The patient was a female, fifty-two years of age, who was unable to retain anything by the mouth, but whom I was able to keep alive for three months by this method of alimentation.

Some patients find it difficult to retain enemata, and in my opinion it is often due to a faulty method of administering them. The enema should be introduced well up in the colon, at body temperature and should be introduced slowly through a soft rubber catheter of sufficient size to give it stiffness and prevent buckling when in the sigmoid. A great mistake that is often made is that of introducing too much fluid at once, and it was my experience with this series of cases that, while the simple nutritive enema of four ounces of fluid was invariably retained, often the patient would expel part of the enema when the eight ounces of saline solution were added, bringing the total quantity up to twelve ounces. After the introduction of the enema the patient should be compelled to remain on the left side for at least half an hour. I have found, after the first two or three enemata, that the bowel acquires a tolerance to them, and, if care is taken of the rectum there is seldom any trouble in getting the patient to retain them afterwards. The bowel should be irrigated at least once every twenty-four hours with copious injections of salt solution.

I have not attempted to go very deeply into the literature on the subject, nor do I lay claim to any original work on the subject, but I will feel that I have accomplished my purpose if I have persuaded some of my fellow practitioners in this state, that rectal alimentation has, or should have, a more prominent place in our category of therapeutic measures than it, at present, occupies.

*Bibliography.*—1. Ewald—"Diseases of the Stomach," p. 150.

2. Chittenden—"Digestive Proteolysis," pp. 116-118.

3. *Ibid.*, p. 117.

4. *Ibid.*, p. 120.

5. Pflüger.—“*Progressive Medicine*,” Dec., 1902, p. 263; also in “*Arch. f. d. Physiolog. Bd. LXXXVI.*”
6. Reach—“*Progressive Medicine*,” Dec., 1902, p. 270.
7. Quoted by Lepine—“*La Semaine Med.*,” 1895, XV, p. 389.
8. Wright—“*Lancet*,” 1895, Vol. 1, p. 1511.
9. Robinson—“*N. Y. Med. Journal*,” 1891, Vol. 2, p. 16.
10. M. Deremberg—“*Zeitschrift f. Biol*” V; quoted by Lepine in “*La Semaine Med.*” 1895, XV, 389.
11. Lepine—“*La Semaine Med.*,” 1895, XV, p. 389.
12. Markwald—“*Arch. f. pathol. Anat. u. Physiol. u. f. Klin. Med.*” Bd. LXIV.; quoted by Lepine—*Ibid.*
13. Curtin—“*Medical Record*,” April 19, 1902.
14. Gardner—“*Lancet*,” 1895, Vol. 2, p. 912.
15. Flint—“*Medical Record*,” 1878, p. 56.

#### DISCUSSION.

DR. F. W. PARHAM, of New Orleans: Personally I am very much interested in this subject. I have often had occasion to give nutritive enemata in various conditions which made it inadvisable to nourish by the stomach, and the question was how best to accomplish the end in view. This is a matter of considerable importance. Dr. Eustis has shown conclusively that much might be expected of rectal alimentation. I should like most of all to hear more on the subject of what should be given. That it should be given in absorbable form goes without question. We can not expect the rectum to take up substances unless they are predigested and experiment as well as clinical experience tends to show that this statement is correct. The work of Cannon, of Boston, on the ascent of substances from the colon through the ileo-cecal valve are of great interest and value in this connection and may explain the successful use of some undigested substances when introduced per rectum. Perhaps Ewald's experiments might be explained in that way. It is of course, almost impossible to introduce a large enema of water through the ileo-cecal valve but the experiments of Cannon seem to show that reverse peristalsis may be set up by small nutritive enemata and carry them through the open valve. This must be, however, comparatively rare and the success of nutritive enemas most usually depends on absorption in the large intestine. We



must have definite ideas in regard to the enema to be introduced and I have come to the conclusion that undigested milk and other substances are comparatively useless, and I have resorted to such proprietary preparations as panopepton, liquid peptonoids, predigested milk. I would like to have Dr. Eustis tell us how he prepares predigested milk. I have been in the habit of using Fairchild's tubes. I have found that some predigested foods act admirably and that I get results that I could not have gotten in any other way. Recently I had a case of gastrotomy; subsequent to the operation the patient took nothing by the stomach for four days yet he suffered nothing at all under the administration of enemata of panopepton and predigested milk and a certain amount of alcoholic stimulation.

DR. J. J. AYO, of Bowie: Rectal alimentation is undoubtedly of great importance. I recall distinctly an old woman who was kept alive for six weeks with nothing but rectal feeding. The secret is, I believe, to introduce the enema high and slowly. Ordinarily this can be done with the soft rubber catheter. If introduced suddenly into the intestine you will surprise it and cause a peristaltic contraction which will expel the fluid, but if you go slowly you can frequently succeed in having it retained.

DR. M. J. MAGRUDER, of New Orleans: While appreciating the value of enemata I believe there is no question but that it can be introduced high up by the ordinary syringe. I have proven this conclusively by introducing cold water high up in children. I have made it a rule to place the child with the hips on a pillow, the shoulders and body being lower, and introducing the enema very slowly, taking probably 20 or 30 minutes to introduce twelve ounces or a pint and by palpation you can detect the line of the descending colon by the sense of cold all along its course showing that the water does go well up into the bowel. In this way we can introduce the enema high up just as well, and sometimes better than, with the rectal tube. Often when using the rectal tube we think it has passed the sigmoid we find it has coiled up in the rectum.

DR. T. S. DABNEY, of New Orleans: Like Priestley who discovered oxygen accidentally, I found out accidentally that in the dog, at least, it is feasible to wash out the entire gastro-intestinal track by adopting a very simple procedure, namely by utilizing the principle of gravity. Upon the advice of a veterinary whom

I consulted, I seized a little terrier of mine that was ill, by the hind legs and raised them as high as possible and administered an enema to him in this position. The water passed through the entire intestinal track and issued from his mouth. It is a question of comparative anatomy as to whether the ileo-cecal valve could be so readily passed in the human being. However I find no trouble in giving a high enema with the fountain syringe, provided the patient lies with hips well elevated, on the left side. The soft, flexible tube too often bends on itself to be depended on too implicitly.

DR. ISAAC IVAN LEMANN, of New Orleans: In explanation of Dr. Dabney's remarks concerning the enema in dogs, I will say that the dog has no ileo-cecal valve and there is no division between the small and large intestine, so that it was perfectly natural for the water to come out of the mouth of the dog, when stood on his head.

DR. A. C. EUSTIS, in closing: I am sorry the paper did not call forth more actual clinical experience in the discussion. Dr. Finney, of Baltimore, employs rectal feeding in all cases of pyroplasty and the nutritive enema used is very much the same as that I have mentioned. The opium is important as it has a sedative effect on the mucous membrane, and the enema is better retained.

In regard to the proprietary foods, my objection is that all of them contain a high per cent of alcohol, which acts as an irritant to the mucous membrane of the intestine, and this is one thing we want to avoid as much as possible.

In regard to my method of digesting the enemata, I always have them digested prior to injection, using the peptonizing tubes of Fairchild. It does not matter how long we digest the substance, as the only objection to digesting it for a long time when giving it by the stomach, is the taste, which is bitter. Of course, we know there are end products in the pancreatic digestion, but no matter how we digest it there is always 50 per cent of peptone left. My preference is to digest the nutrient material for twenty minutes, but, of course, it must not be kept after being digested on account of the growth of bacteria. McKenzie has perfected a very ingenious device, which he calls an artificial stomach. It consists of a glass funnel to which is attached a rubber tube ending in a soft rubber catheter. A clamp on the rubber tube controls the outflow



of the contents of the funnel, and by covering the funnel with a heavy cloth hood the warmth of the contents of the funnel can be retained for a long time. He also admits steam beneath the hood, from the spout of a kettle with boiling water, and in this way he has been able to maintain the necessary warmth to allow the digestion of the contents of the funnel. After digestion has gone in the funnel for a short while, he introduces the catheter into the rectum of the patient while lying on the left side, and by elevating the funnel only slightly above the patient the enema is introduced very slowly. He often takes as long as two hours to introduce a single enema in this manner, but the advantage is that the fluid is introduced so slowly that it is absorbed as fast as it is introduced.

I agree that the enema should be introduced slowly. As regards the introduction of enemata into the large bowel by means of the short nozzle, we know that this can be done, but the fluid accumulates in the rectum as a rule, and by its presence stimulates the nerve endings, and naturally produces a desire to empty that organ. No matter how you elevate the hips of the patient and try to cause the fluid to flow into the large bowel, there will always be more or less accumulation in the rectum. We cannot invert a patient in the same manner as we can a dog.

### **Chloroform Anesthesia.**

By A. JACOB, A. B., M. D., New Orleans.

It is not my intention to go into details about this subject, for the matter has received much attention in the medical literature of the past two years, and has been the subject of discussion heretofore before these meetings. Nor is it my intention to discuss the other anesthetics and their availability, nor methods of mixed anesthesia, because the latter are only for hospital use, while we have just one anesthetic which may replace either ether or chloroform,—anesthol—that has not been sufficiently tried to commend it. But my desire is to give some of my own experiences and observations in the administration of this anesthetic, and, if possible, to convert a few, who have not the trained anesthetist nearby, to the use of ether. I wish especially to make the practitioner feel the greater responsibility attached to the administra-

tion of this anesthetic, to give it less often, and to recognize the dangers attached to each administration. There are few of us indeed, who have not had some unpleasant experience with this anesthetic, and felt the extreme anxiety attached to its administration, either by us or by some one for us. One does not doubt and everyone will acknowledge the necessity of the trained anesthetizer, but those who are not fortunate enough to have one near, must begin the use of an anesthetic which is safer in administration, especially in the hands of the inexperienced.

It must be acknowledged that the method of administering chloroform, as practiced by many, is extremely dangerous, and done with too much laxity. The cone at the commencement of the administration of the anesthetic should be held well above the face, and, as the chloroform is dropped upon the cone, be brought gradually closer to it. In this way, I feel that the danger of sudden death is greatly lessened, because it permits the terminal nerve filaments of the fifth nerve to become accustomed to the anesthetic, and minimizes the chances of shock, which may be the result of its too rapid administration. It should be given by the drop method, and with the admixture of plenty of air, which can be accomplished by the frequent removal of the cone. There is no doubt, also, that the pouring of the anesthetic upon the cone is a frequent cause of respiratory failure, for there is a rapid overwhelming of the respiratory centres by the anesthetic. Many of you have seen the anesthetizer place the cone upon the patient's face, tell him to take a deep breath, and pour on the anesthetic as if it were necessary to strangle the patient in order to narcotize him. Others will keep the cone glued to the face of the patient as if afraid that otherwise the patient might awake and create a disturbance, not recognizing the necessity of plenty of fresh air as a most excellent safeguard. The anesthetizer should bear in mind that he must produce and retain anesthesia with the least possible amount of anesthetic.

For the administration of chloroform in infants and very young children, a different procedure may be necessary, and the one which I have used, is to pour the chloroform upon the cone, place it upon the face, and after the child has taken a deep inspiration, remove it, and repeat again if necessary. When the signs of narcosis are present, institute the drop method.

There is no positive sign which shows the patient to be fully under the anesthetic, though one can depend practically upon the contracted pupils, loss of reflex, and muscular relaxation combined. However, I have found that the reflex might be present and remain so during the operation without any disturbance resulting. In such a case, one can depend upon the muscular relaxation and the contracted pupil. It is often impossible to produce loss of reflex, and I see no reason why one should try to produce it, often at the risk of the loss of the patient. This is frequently seen and should be as frequently condemned. Another fixed idea with many seems to lie in the necessity of touching the cornea to determine the presence of the reflex. This is not required, as the touching of the under side of the eyelid is just as satisfactory. Nor is it necessary to determine it frequently, as the contraction and the relaxation of the pupil can be depended upon. The method of touching the cornea is not only dangerous, producing at times an iritis, but also adds chances of dropping chloroform into the eye. Indeed, I have seen some men, even hospital internes, determine the presence or absence of the reflex so very frequently, as if the life of the patient depended upon it entirely. Very often, after the patient has taken plenty of anesthetic and one is not sure that the patient is under its influence, he might allow the operator to proceed. But the operator should not begin until the anesthetist considers the patient under the anesthetic. For, it will not only mean much trial and tribulation to the operator, but chagrin to the anesthetizer. The operation is delayed, and the struggles of the patient renders the chances of infection greater, owing to the parts being exposed, and the hands of the operator and assistants becoming contaminated. Besides, the patient may be badly shocked, from which he may never react thoroughly during the anesthetization. Again the patient never seems to be narcotized, and vomiting frequently persists throughout the operation, which interferes greatly with an operator in abdominal work. Some operators, however, never seem to appreciate the difficulty with which the anesthetist must contend, and should bear this well in mind.

The dangers of the administration of this anesthetic lie in three conditions, first cardiac failure, second, respiratory failure, and third, after-effects: (a) Nephritis, (b) fatty degeneration of the organs. The first two are the ones with which the anesthetist must



deal. I don't think that much can be said about the treatment for cardiac failure, because, after the heart has ceased beating, I feel that we have only two methods at our command, both of which are of but slight avail—adrenalin chloride injected into the veins, or direct massage of the heart. The former is seldom of avail and the latter only of momentary effect, besides, neither are of use to the general practitioner. The second condition, however, can be successfully managed if the pulse remains good, as it only requires coolness and the retention of the presence of mind of the anesthetist. No time should be lost in the administration of hypodermics, but the body should be brought down to the head of the table, the head resting over the edge and, while rhythmic traction is made upon the tongue, artificial respiration should be performed. Ammonia should be held over the nostrils, and stimulation given if necessary. I would like to insist at this period on the use of larger doses of strychnin, digitalin, or atropin, if they are indicated, for I have never hesitated to give a tenth of the former, a twenty-fifth of digitalin, or a fiftieth of atropin. Regarding the use of morphin previous to operation, I believe that it is only indicated in those of nervous temperament or of alcoholic habits. If we find the respirations becoming shallow, the pulse slowing, the removal of the cone will frequently suffice to restore the normal conditions. But, if this does not result satisfactorily, we must hasten to the use of our cardiac and respiratory stimulants. It is my opinion, that one can rely safely upon the color of the patient, even if the pulse is affected, as this may be due to traction upon the nerve trunk or some organ well supplied with nerve fibres. A pale color will always indicate either considerable hemorrhage, or severe shock. But, a good color, with satisfactory respiration, certainly indicates a favorable condition of the patient, while, if the features are pale, the pulse failing, and the respirations shallow, we are confronted with an extremely dangerous condition, which must require our immediate attention to the patient. In such a case, a hot saline enema with strong coffee will prove quite satisfactory, and, if absolutely indicated, an infusion of from two to four pints may be given, together with cardiac stimulants.

It seems to me that we make too frequent use of the tongue forceps, because, if the jaws are held well forward, they can be dispensed with, for they often lacerate and injure the tongue

severely. An excellent method of holding the jaw forward is to attach the lower teeth in front of the upper and to hold them there by keeping the chin forward. The exception may be considered in those with short fat necks, when a heavy silk thread passed through the tongue will prevent the traumatism which would follow the use of the tongue forceps. In regards to the use of the mouth-gag, I hold that it is dangerous because it allows the tongue to fall back and occlude the larynx.

I have had four unpleasant experiences, three of which were respiratory failures, that may be worth relating. In one case, a forceps delivery, the doctor insisted on beginning manipulations before the patient was thoroughly under, and requested me to push the anesthetic. I followed his directions, and only a few minutes elapsed before artificial respiration had to be begun. Fortunately, the patient was restored to consciousness and again brought under the influence of the anesthetic before operative procedures were instituted, after which we proceeded without any further trouble. In this case, if the operator had not commenced until the patient was thoroughly under the anesthetic for several minutes, I feel certain that this unpleasantness would not have occurred. This is an extreme fault which many operators have and, on account of which, they frequently hold the anesthetist responsible for all resulting unpleasantness.

Another case with which I had a close call, was one in which a dentist desired to remove some necrosed inferior maxilla. This was done at the hospital, but the patient had not been thoroughly prepared for the anesthetic, and had been brought over to the amphitheatre from the clinic. I advised the doctor to go slowly and to wait until the patient was thoroughly under before attempting any operative procedure. However, as he was impatient and in a hurry, he began to scrape the inferior maxilla, which is rather a dangerous region for the anesthetizer, and the warning had hardly been uttered before respiration ceased. It required fifteen minutes of good work to restore her, and the dentist then completed his operation, but went about it in a more cautious manner. It might be mentioned here that it is best to have the reflexes absolutely absent in operations upon regions in which the fifth nerve is present.

A third case which I have had was one of a gynecological nature, and, as the operation was nearly completed, I allowed, as I usually



do, the patient to gradually recover. However, the operator decided to do a perineorrhaphy in addition, and I began to push the anesthetic again, when the patient stopped breathing. She was restored satisfactorily, and the operation was completed without any further trouble or anesthetic. In these three cases, the pulse always remained good.

The fourth one which I intend to relate, occurred after the anesthetic had been stopped, the operation completed, the patient slightly awake, and the bandage ready to be applied. It is difficult to place the responsibility and, as he received only one and a half ounces of Squibb's chloroform, I cannot see how one can attribute the death directly to the anesthetic. The patient had not received any chloroform for at least five minutes, the cone had been removed from the face for that length of time, and the bandage was just ready to be applied, when he gasped suddenly, stiffened out, and became cyanotic. Artificial respiration for three-quarters of an hour, injections of one-fifteenth of strychnin, one-thirtieth of digitalin, thirty minims of ammonia, availed nothing, as the heart had ceased beating. The patient had stood the chloroform well, the pulse had always remained good, and I did not have any trouble during the operation, which was for an enucleation of the eye. His family history was bad, and there may have been some underlying, unrecognized condition. The last two cases were done in private homes, while the other two took place in the hospital. None of these cases had been thoroughly prepared for the administration of an anesthetic, nor had a microscopic test of their urine been made. These are experiences in over five hundred cases of chloroform anesthesia, and have been the cause of much to be remembered on my part.

As I am about to arrive at my conclusion, I have decided to say a few words about the preference for ether, and its administration. It has always seemed strange to me that, as I anesthetized for different physicians, they waited till the patient did badly under chloroform before they would begin the administration of ether. For, if one desires to get the patient under the anesthetic quickly and without much struggling, the procedure of administering chloroform until the desired effect is present, to be followed with ether, is very heartily commended; but it is certainly not necessary to postpone such action until the ether is specially indicated. One

must acknowledge three important facts, first, that chloroform is the more dangerous anesthetic, as proved by statistics of competent anesthetists; second, that ether is more a cardiac stimulant than chloroform; third, that there is more danger from kidney complications when chloroform is used than in ether anesthesia, as proved by Willy Meyer's experiments, and by Israel of Berlin, the authority on surgical operations upon the kidney, who used ether altogether. I do not desire to give all the facts of the statements, for the literature is full of the matter, together with statistics, and I would be taking up much valuable time of the meeting, if I were to discuss them. It suffices to say that ether anesthesia is becoming more general every day, and we have a report from the hospital of the Mayo brothers, of Rochester, Minnesota, in which it has been administered 10,000 times without a fatal result, and that of Poncet, of Paris, who administered it 29,000 times with only one fatal result, a child with cardiac disease. Of course, this was done by experienced anesthetizers, but I doubt that even if chloroform had been administered by one of equal experience such a result would have been attained. But, what I desire to impress upon the members, is that ether is a far safer anesthetic in the hands of an inexperienced person than chloroform, for in such a case there is always a tendency to pour the anesthetic upon the cone, a method which is certainly safer with ether. The most important duty of the anesthetizer in that case is to watch the respirations, for that and the color of the face are the two data upon which experienced anesthetizers now depend.

Now, as to the administration of ether, we may adopt any of three procedures. The cone with cotton inside, the ether being poured into it, or any of the special inhalers, the ordinary Esmarch cone with two wet towels thrown across it, leaving a small opening only into which the ether is poured, or the cone prepared in the same manner, but the ether dropped upon the opening continuously. I consider the last method the best, and very easy of application. It is the one used by the Mayo brothers, of Rochester, Minnesota.

In conclusion, even if we acknowledge that chloroform or its various mixtures, given by competent anesthetists, results in only a small percentage of deaths in the healthy individual, yet must we not also acknowledge, that on account of the greater safety of ether, in the hands of the general practitioner, who must

frequently give an anesthetic, and who cannot be expected to be an expert, the general use of ether given in small quantities, on open cone, and by the drop method is far the better and safer. And, if we insist on giving chloroform, let us see that it is administered with an admixture of plenty of air, by the drop method, and that the least possible amount be used to produce and retain anesthesia.

#### DISCUSSION.

DR. JULES LAZARD, of New Orleans: The dangers from chloroform can be divided into three stages—the beginning, the stage of excitement, and the stage before full recovery. The more one gives chloroform the more he dislikes to give it, or any other anesthetic. In the beginning the danger comes from inhibitory reflexes from the fifth nerve. I have seen chloroform given in the period of excitement, and seen it pushed, and that, I think is bad practice. If the patient is struggling we should allow him to become calm. In the stage just before recovery, I have noticed the pupil dilates, the face becomes ghastly white and then breaks out in a perspiration. Usually vomiting starts at this time and in the violent expulsive efforts, the heart ceases action. Dr. Jacoby relates a case where death came on after the chloroform had been withdrawn and the operation completed; I believe he said the bandage was being applied. These are observations I have gathered from clinical experience, not from the text-books. The abuse of stimulation I have seen not once, but twenty times, and a 1-50 gr. of atropin in broken doses given to a patient in chloroform narcosis will not do more good than 1-100th. gr., with the latter, when the patient recovers he does not suffer from over stimulation. I have seen hypodermics given to the patient in great rapidity, like the pursued elephant gets javelins from the Bushman. If the patient is in bad condition we should not lose our heads, should be gentle, begin artificial respiration, the effort being to make him breathe about 18 and not 40 times to the minute, and one man alone should attend to that. If there is cardiac paralysis, stimulation will do no good, rectal dilatation will do no good. If the heart has stopped, the patient is gone; if respiration has stopped, there is some hope.

DR. WM. M. PERKINS, of New Orleans: Just one point, and

that is I think we should not give up the patient simply because the heart has stopped beating, for I have seen patients recover when there had been absolutely no pulse. I do not think the stopping of the pulse, as far as we can determine, is necessarily an indication that the patient will die. It is wrong for the doctor to say the patient will die and do nothing, because we have all seen cases in which there was no perceptible pulse, pull through. It does not need a doctor to say the man is dead; it takes the doctor to bring him back to life.

DR. C. J. GREMILLION, of Alexandria: It is very advisable that urinary examinations be made in most cases before anesthetization, though sometimes this may be impossible or unnecessary. All emergencies should be provided for in every case. The important safeguard is the use of the drop method.

DR. E. D. FRIEDRICHS, of New Orleans: I also consider ether the safer anesthetic, but there is no one anesthetic agent that we possess at the present time that will fulfill all the requirements. Each has its indications and contraindications. I do not think it wise to give ether in the face of its contraindications. If we must adopt one anesthetic agent as a routine practice, ether no doubt should be the anesthetic of choice. The use of the improved inhaler (Senn or Laplace's further modification of the Esmarch inhaler, by covering the sides of the cone with metal leaving an ample opening at the top for air) renders the administration of ether by the drop method safe and very satisfactory. Hofmann and Braum seem to have had a very satisfactory experience with the method of mixing chloroform and ether in certain cases. Ether is given by the drop method on an open inhaler and if it is found impossible to completely narcotize the patient, chloroform is added in drops, only using the chloroform when the ether drop is not sufficient. They claim that by this method, ether is never given in sufficient concentration to produce lung complications, and chloroform never in sufficient amount to endanger heart or circulation.

DR. A. C. KING, of New Orleans: The professional anesthetist is one of our important needs. We should also be careful in the choice of the chloroform used. Two or three years ago the House Surgeon of Charity Hospital mentioned to me the recent unusual death rate from chloroform, and he attributed this to the quality



of the chloroform used, and stated that since then only the best obtainable drug had been used, and the improvement had been marked. The method of pulling the jaw forward by the same hand which holds the cone was taught me by one of the resident students at the hospital, and I have been using it since with advantage.

DR. JACOBY, in closing: I agree fully that there are times when ether is contraindicated, but when we have conditions where we can use either, we should prefer ether to chloroform. The reason for this has been well illustrated in the literature of the past two years, and the very fact that most surgeons, and especially anesthetizers, are now beginning to use ether entirely, indicates that we would be behind the times not to use it. The old theory that chloroform is less dangerous in kidney complications because it is less easy to get rid of by the system, is untenable. Chloroform will remain in the system longer and irritate the kidney much more than ether is liable to do. In the majority of cases there are more contraindications for chloroform than for ether. There are different kinds of inhalers, but all of them have some disadvantages—they are bulky and heavy and not for general use. The administration of ether works just as well with an Esmarch as any I have used. The Mayos use the drop method. They have a lady who gives all the anesthetics, and she has 11,000 cases with no fatal result. Complications are liable to follow both ether and chloroform. I am sure I should be glad to devote my whole time to giving anesthetics, but the doctors do not give us the work.

The kind of chloroform used is very important. We use Squibbs, which is very good and safe. I remember the time to which Dr. King referred, when there were a number of deaths at the hospital, but it was proven that these were not due to the chloroform, but to the manner in which the anesthetic was administered. You must remember that we get new men in the hospital every year, and we must look for some deaths in the beginning; and this leads me to say, that the administration of chloroform should be taught in the schools before graduation. In the stage of excitement, we should give the drug very slowly and with the admixture of plenty of air. As the patient gets under, return the cone to the face, and then go ahead with the drop method, and you will have no unpleasant results. I do not believe in giving the patient up



at any time. If a patient shows signs of heart failure under chloroform, I make it a point to work for three quarters of an hour, by artificial respiration, stimulation, etc. As I perform artificial respiration I resort to pressing the hand on the abdomen; this often helps, and sometimes, when the patient holds his breath for quite a while, it will make him breathe nicely. The point I want to insist upon particularly is, not that ether is much safer in the hands of the experienced man, but that for those who cannot get experienced anesthetists, ether is far safer.

### Dacryocystitis.

By R. F. HARRELL, M. D., Ruston, La. (Chairman of Section on Ophthalmology).

In bringing before the society at this time the subject selected, I have been actuated mainly by my anxiety to hear the discussion of others, who have had larger experience than I have in the treatment of these cases. Their frequent occurrence, together with their intractable nature in some cases, constitute them a very important line of cases, not only to the oculist, but also to the general practitioner as well. All who have been in the practice of medicine long, have had more or less experience, and have felt at times, their helplessness in the successful termination of some of these cases. As my experience has been quite limited in the treatment of this disease, I will not attempt to offer anything original, but merely call the attention of this body to some points as taught by the accepted literature of the day.

Theobald says that dacryocystitis, or inflammation of the lacrymal sac, occurs as a chronic, and also as an acute affection. Primary inflammation of the lacrymal sac is extremely rare. In the vast majority of cases the disease is secondary and dependent upon disease of the nasal duct, stricture of the duct being the condition which usually gives rise to it. Primary, acute dacryocystitis is said to occur occasionally in strumous children, and it may also be produced by external violence, or by the entrance into the sac of an irritant fluid. Inflammation of the lacrymal sac, secondary to disease of the nasal duct, usually begins, not as an acute, but as a mild chronic affection, the so called blenorrhoea or catarrh of the sac, which is unattended by pain, but makes itself manifest chiefly by the accumulation of tears and mucous in the sac, their

regurgitation through the puncta, and the existence of epiphora. Acute exacerbations of the catarrhal inflammation, characterized by the formation of pus, are liable to occur from time to time, and constitute what is known as abscess of the lacrymal sac, or dacryocystitis. From the same author we quote the following: The history of most cases of dacryocystitis is as follows: Inflammation of the walls of the lacrymal duct (usually secondary to nasal disease), leading to more or less occlusion of the duct; in consequence of this, accumulation of tears in the duct above the point of occlusion and in the lacrymal sac; the retained tears, owing to the entrance of bacteria from the conjunctival sac presently undergoing putrefactive changes, and as a result of this irritating the mucous lining of the sac and duct, and exciting in it a catarrhal inflammation. Mucus collects in the sac as a consequence of this and thus supplies the conditions most favorable to the development of a chronic and persistent inflammation. In some instances this state lasts indefinitely without undergoing appreciable change, but in others, whether through the occurrence of a slight traumatism, exposure to cold, the entrance into the sac of micro-organisms of unusual virulence, some constitutional disturbance, or as seems to happen occasionally, the sudden occlusion of the canaliculi at their point of juncture with the sac, the inflammation undergoes a rapid change in character and assumes an acute form. Severe pain, accompanied by tense swelling of the sac and marked edema and redness of the lids and surrounding parts, comes on; thick, creamy pus forms in the sac, and not unfrequently decided evidences of constitutional disturbance, such as fever, preceded perhaps by rigor, loss of appetite for food, and sleeplessness, manifest themselves. After several days of intense suffering the integument over the sac assumes a yellowish appearance, becomes thin and bulging, and, if left to itself, usually gives way at a point about corresponding to the lower margin of the orbit, permitting the contents of the sac to escape, and affording the patient almost immediate relief from suffering.

Reeve says acute inflammation of the lacrymal sac is generally a sequel to mucocoele, although now and then it lights up primarily as a complication of acute coryza (influenza, la grippe), especially in young infants; also of erysipelas. In scrofulous or syphilitic subjects periostitis or osteitis in the lacrymal region also causes

acute or sub-acute cystitis. After exposure, or in the course of rhinitis, etc., the subject of mucocele finds that pressure on the inner canthus does not disperse the doughy swelling as usual, but that the latter has become hard, tender and tumor-like. Quickly pain, often intense and due to tension, sets in, with inflammatory edema, which in marked cases closes the eye and extends to the cheek and over the nasal bridge, involving the lids of the opposite side. With the canaliculus and duct closed, there is now virtually an abscess, which if unrelieved in a few days, points and opens below the internal tarsal ligament, the pain, swelling, etc., quickly subsiding. The rapid onset and smooth glistening skin with bright blush, have time and again led to a diagnosis of erysipelas, but the history of epiphora and mucocele, and the intense localized pain and exquisite tenderness at the site of the sac should give the clue. Generally the breach soon closes and there is once more mucocele, or simple cystitis, which may later lapse again into the acute form. Very rarely the sac resumes the normal condition. Fuchs says dacryocystitis consists in a purulent inflammation of the connective tissue surrounding the lacrymal sac. This inflammation leads to purulent disintegration of the sub-mucous tissue with the formation of an abscess which ruptures externally. Dacryocystitis is accordingly a phlegmon. Blennorrhœa of the lacrymal sac, on the contrary, is a catarrhal inflammation of the mucous membrane itself, in which the purulent secretion of the latter is deposited upon the surface only. The connection between the two diseases consists in the fact that the blennorrhœa of the sac precedes the development of the phlegmon, and gives rise to it; for the blennorrhœal sac is filled with decomposed secretion, and it only requires the presence of a small defect in the epithelial covering of the mucous membrane of the sac to enable the micro-organisms of the secretion to penetrate into the sub-mucous tissue, where they excite suppuration and cause dacryocystitis.

#### TREATMENT.

Fuchs says if we are dealing with a dacryocystitis in its very inception, we may try to prevent the development of an abscess. With this end in view, we sedulously express the fluid from the lacrymal sac, inject it with antiseptic fluids, and in the interval,

apply a pressure bandage, which constricts it. If the inflammation has passed the initial stage, it is idle to endeavor to prevent the formation of an abscess; besides, the methods of syringing, expression and compression, could not be employed on account of swelling and painfulness of the parts. The only thing to do now is to hasten the formation of the abscess, an object which is best attained by the use of moist and warm compresses. As soon as fluctuation makes itself apparent, we incise the interior wall of the lacrymal sac, that portion of the skin beneath which the presence of pus can be made out. A lacrymal fistula is thus artificially produced through which the contents of the abscess and the lacrymal sac itself are discharged externally. This is kept open by the introduction of a strip of iodoform gauze every day until all inflammatory symptoms have disappeared, and the secretion that exudes has lost its purulent character. But even then we ought not to allow the fistula to close at once for we must recollect that a blenorrhoea of the lacrymal sac has preceded the dacryocystitis, and that consequently there is a stricture present in the nasal duct. If the fistula should close without the stricture being relieved, we should have to apprehend another attack of dacryocystitis. Hence, the permeability of the nasal duct must first be restored by treatment with sounds. When we have succeeded in doing this, the fistula usually closes of itself. If this should not be the case, we can effect a closure by either refreshing and uniting the edges of the wound or by their cauterization. If the conditions are such that a permanent state of perviousness of the lacrymal channels is unattainable, we proceed to the operation of destroying the lacrymal sac.

Dr. Born of New York says that if phlegmon of the sac can not be prevented in the early stage by frequent pressing out of the sac and injection of antiseptic solutions, it is best to hasten the formation of the abscess by moist warm compresses. As soon as the presence of pus becomes apparent by fluctuation, a free incision should be made into the anterior wall of the sac, the contents pressed out and the warm moist compresses continued. Daily cleansing of the sac by syringing and a subsequent injection of a 1% solution of nitrate of silver into the sac would shorten the course of healing. During this stage of the inflammation, the mucous membrane is swollen, its blood vessels are engorged, and the folds



at the entrance of and in the duct are enlarged. Passing probes without lacerating the tissues would be difficult, and traumatic strictures may be the result. He prefers to let the inflammation subside, and after the opening has closed, proceed with the local treatment of the catarrhal inflammation. When the abscess has opened upon the outer wall of the sac, and the pus has undermined the skin and produced a fistula upon the cheek, the entire length of the sac is opened and the granulating surface freely cauterized with the nitrate of silver crayon. The treatment of chronic catarrhal inflammation of the sac must be directed first against the cause of the disease in the nose. With the imperfect construction of the valve of Hasner, and the patulous condition of the lower portion of the nasal duct, being naturally constricted near its middle, we have a condition favorable to occlusion of the duct in all cases of rhinitis, more especially in those cases where there is hypertrophy of the turbinates. We are to reduce the hypertrophic condition of the turbinates, either by cauterizations, or removal of the redundant portions by means of the saw or knife. After all obstructive tissue is removed, the daily cleansing of the nasal cavity with alkaline sprays is indicated. Dr. Born says a large number of cases will yield to persistent local treatment of the conjunctiva and lacrymal sac. The contents of the sac are frequently emptied, and astringent eye washes, solutions of sulphate of zinc, tannic acid, alum, or nitrate of silver instilled two or three times a day; or once or twice a week, nitrate of silver solution (1%) is injected directly into the sac through the punctum without slitting the canaliculus, by means of a small lacrymal syringe. Heat applied over the sac several times a day and massage over the sac help to establish a good reaction. If this treatment is faithfully carried out for several weeks, in some cases for a few months, the dacryocystitis will in very many cases be permanently cured without epiphora, which is frequently observed after the slitting of the canaliculi, whenever there is a hypersecretion of tears. The function of the tear passages is not simply that of a drainage pipe, but they act as a suction pump. The canaliculi are surrounded by spiral muscular fibres from Horner's muscle, by which they are compressed in winking. The act of winking is an important factor in removing the hypersecretion of tear fluid. Ordinarily the tear glands secrete only a sufficient quantity of



fluid to keep the conjunctiva, cornea, and tear passages moistened, and only when the eye is irritated or inflamed, or upon psychical stimulation, a greater supply of tears is furnished, which will run over the cheeks unless removed into the lacrymal passages by frequent winking. The spiral muscles cause a vacuum at the orifices of the canaliculi, into which the tears are drawn when the lids are opened, and they press the contents into the sac when the lids are closed. The elasticity of the walls of the sac may then facilitate the descent of the fluid into the nasal duct. Before resorting to operative treatment we should make at least a reasonable effort to preserve this valuable apparatus.

Dr. Hunter says, however, that probing is indicated in all the milder cases of catarrh of the sac which do not respond after a reasonable time to the expectant treatment, and in all the severe cases, including phlegmonous dacryocystitis. In the latter class, preliminary treatment by hot fomentations and free external incision should be employed, probes being resorted to after subsidence of pain and swelling. Technique: Slit the canaliculus on the conjunctival surface of lid, make lateral incision of lacrymal sac, and, if necessary, follow by probing, using as large probes as the bony cavity will permit without undue violence, i. e., from a No. 6 or 8, to a 16 Weber probe, immediately after incision. Always before probing syringe with cleansing solution and astringents varying in strength from a normal salt solution, to a 2% nitrate of silver solution, or a 25% argyrol solution. Duration of treatment is from a month to a life time. Stiles are some times used in the obstinate cases but, as a rule, only when patients live at a distance, or for some reason cannot be seen often. The most obstinate cases are often only the local manifestations of deeper seated trouble in the ethmoid, or frontal sinus, etc. Outlook for a permanent cure: Most of the cases are made quite comfortable, but very many are disappointing as regards perfect cure by any method of treatment. He considered that treatment by probes, however, was the most satisfactory method in his hands. Dr. Lewis of New York says that treatment of the nasal membranes often cures. As a technique he advised a free opening backwards and free cut at junction of canaliculus and sac. He used probes 6-12, and syringed freely with borax solution. As to duration, he said chronic cases with simple lacrymal or mucoid secretion

do not respond to treatment as quickly as acute dacryocystitis with purulent secretion. Cases of long duration do heal under probing and syringing. Most cases were stricture cases, either from swelling of the lining membrane or were cicatricial. Hence the chief point in treatment was thorough drainage.

At the meeting of the New York Academy of Medicine held in April or May 1903, in the Ophthalmic Section, Dr. Duane presented a case of extirpation of the lacrymal sac, done in the stage of phlegmonous inflammation. History of epiphora for ten years. The phlegmon had been twice opened, once by another surgeon, and once by himself; but as it showed a constant tendency to re-form, and as its treatment promised to be tedious, he concluded to extirpate the sac. This was done eleven days after the outbreak of the phlegmon. The collapsed sac was distended with iodoform gauze, passed in through the original incision. This facilitated the subsequent dissection. The canaliculi were not obliterated, nor was the lacrymal gland taken out, but the nasal duct was thoroughly curetted. The internal canthal ligament was not divided. Result: Primary union with almost invisible scar. Epiphora only on exposure to wind, and then very slight. One slight attack of conjunctivitis since operation, which was done in July, 1902. Dr. Pooley remarked that he had practically ceased probing chronic cases. He favors extirpation of the sac, especially in these cases, before cataract extraction.

Dr. Thomson referred to two cases, one chronic and one acute, on which he operated after the Holmes method with good result.

Dr. Tyson stated that he operated according to the Knapp method; in addition he closes the punctum of upper and lower lids with a galvano-cautery point, and had obtained much better results than without the latter procedure.

The indications and technique for extirpation of the lacrymal sac according to the method of Dr. Arnold Knapp are as follows:

Indications: Chronic purulent dacryocystitis; if of some standing and antiseptic treatment has not succeeded in curing the suppurating character or if the sac is dilated. In this group of cases the great danger to the eye in possible corneal affections should not be lost sight of.

2d. Repeated attacks of acute dacryocystitis with abscess.

3d. Whenever the sac is dilated, whether the contents can be expressed or not.

4th. Lacrymal fistula.

Methods: The anesthesia may be local or general, the local being only suitable in the absence of acute inflammatory conditions. The superficial cutaneous incision may be anesthetized by the ethyl-chloride spray, or by the usual infiltration-anesthesia. Subsequently the parts can be rendered more or less insensitive by the local application of a cocaine solution, and in suitable cases it will be found of advantage to inject a weak solution of cocaine into the sac before operation. The incision begins just below the internal canthal ligament and passes down and out along the prominent orbital margin for from  $1\frac{1}{2}$  to  $2\frac{1}{2}$  cm. The ligament may be divided or not. If it should be divided, care must be taken to carefully join the divided parts at the termination of the operation, so as to prevent a possible sinking in of the caruncle. The incision is carried through the subcutaneous tissue and the anterior fibres of the aponeurosis until the sac itself is exposed. This structure is usually recognized by its pale red or bluish red smooth uniform surface. Hemorrhage from the lower part of the incision is apt to be annoying, but can generally be controlled by a suitable introduction of the retractors and by compression. The sac is then isolated by blunt dissection from its inner wall; proceeding upwards, the cupola is freed and the sac can be more or less lifted out of the fossa. The outer surface is usually more adherent and has to be separated by cutting. This can be easily done by a pair of small blunt scissors, the attachment above and outwards to the two canaliculi being carefully separated. The sac is cut off as low down in the lacrymal canal as possible, and the canal is thoroughly curetted with a small spoon. With the aid of reflected light, after the edges of the wound are properly separated, a careful inspection is then made of the walls and the roof of the lacrymal fossa with a view of detecting any carious bone. These possible complications must all be met and radically treated. We must be very careful to see that the top of the lacrymal fossa is perfectly clean. If the bone on the inner wall (lacrymal bone) should prove to be diseased and superficial curetting be deemed not sufficient, a free opening should be made right through this into the nose. This enables the removal of the diseased bone, and also

insures proper drainage, the opening entering the nose in the anterior part of the middle meatus, just below the head of the middle turbinal.

The operation is concluded by the exact approximation of the wound edges with two or three sutures and the cavity is obliterated by proper pressure and this pressure must be kept up in the dressings for the next few days.

### **Report of a Unique Case of Destruction of Both Eyes by a Stray Bullet from a Pistol.**

By F. M. THORNHILL, M. D., of Arcadia.

No scientific merit is claimed for the case I am about to report, and its chief interest centers in the novelty of the circumstances under which the accident occurred, and the unique character of the injury sustained.

About August 1st, 1897 I was sent for to visit H. M. L., aged 65, a respected white citizen and farmer, living two miles from Arcadia. On arriving at the house I found the old man lying on a cot on the front porch, with the members of his family and a number of his friends and nearby neighbors, gathered about him mystified and conjecturing as to what had happened, as no marks of violence were visible to them on his person. He had suddenly been deprived of his vision and was totally blind, but was able to relate his experience in an intelligent manner and to suggest a solution of the mysterious occurrence. Having occasion to defecate during the noon hour of the hot summer's day, the old man had sought the cool and retirement afforded by the shed of a cane mill, situated in an enclosure a hundred or two yards in the rear of the house, where he was protected from view by a luxuriant growth of weeds. A neighbor living two or three hundred yards away, was target shooting, with an improvised pistol and while the old man was in the squatting position during defecation, one of the bullets missing its aim, struck him in the outer canthus of the left eye, completely demolishing it and passing under the bridge of the nose, severing some of the intra-ocular muscles and the optic nerve of the right eye lodged behind the globe and in front of the orbital plate, pushing the globe forward and upward, rendering it immobile and hard and tense. I removed the eye the



next day and found the bullet imbedded in the muscles at about the point where the optic nerve had been severed. The bullet had so effectually done its work on the left eye that there remained but little for me to do except to trim away the remaining fragments of the muscles and structures of the eye. There was little or no elevation of temperature following, but the old man's mental balance was overturned for several weeks afterwards; but he eventually made a good recovery, living in full possession of his mental faculties until a year ago when he died from some unknown cause.

### **Gunshot Wound of Face Resulting in the Complete Destruction of the Sight of Both Eyes.**

By O. O. HAMNER, M. D., Bienville, La.

On the evening of June 5th, 1903, I was called to see a negro boy who had been shot. It was quite dark when I arrived. I found the patient to be a negro boy about four years old. He was lying on some old quilts on the gallery of an old log house; his face and head were covered with clotted blood and dirt. The patient had been shot by his older brother accidentally with a cheap single-barrel shot gun, loaded with small shot, the whole load taking effect in his face and head. The boy seemed to be laboring under considerable shock and was making a peculiar noise in breathing, which was due to blood in the posterior nares. His pulse was fairly good and he was not suffering very much. I had the mass of clotted blood and dirt removed with a solution of bichloride of mercury and with the aid of a small brass lamp examined the wound as best I could. I found that the whole load had taken effect in his face and scalp. Some six or eight shot were in the bridge of the nose and I could feel a great many just under the skin over the frontal bone. Looking closer I saw that two shot had entered at the inner canthus of the right eye and had completely destroyed the eyeball, letting the vitreous humor escape. At first the left eye seemed not to be injured, but on closer inspection I could see that one shot had cut about two-thirds of the calibre of the upper margin of the lower lid and had entered the eyeball. Several shot had taken effect in the other parts of the face; some had cut the margin of the mouth and others had lodged in the cheek bones.

I dressed the wound with bichloride gauze, administered some

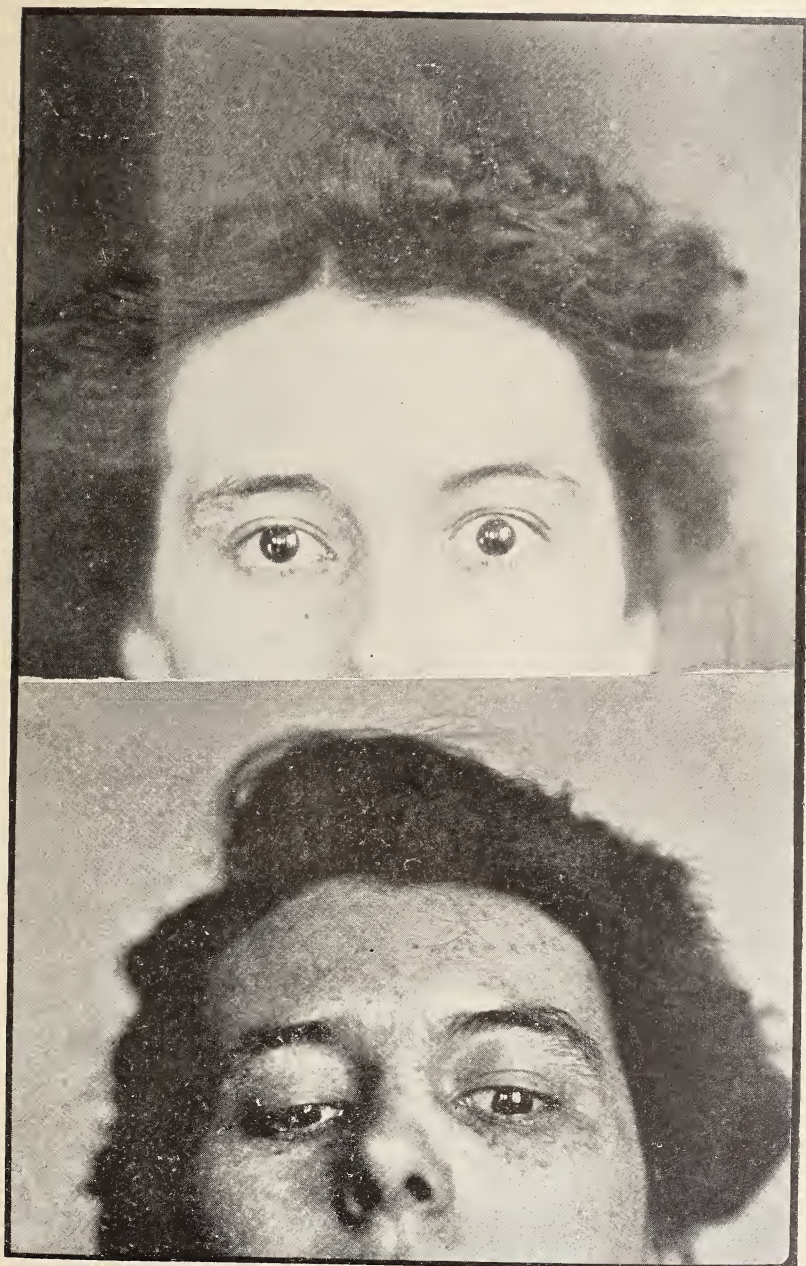
strychnia, had the patient removed to a bed and then left an opiate to make him rest. The next morning the father reported the child doing well. I insisted on going back and removing the right eye, but this the father would not consent to, and I did not see the patient again until the wound was almost healed. The child seemed to be in excellent health after his recovery, but had lost the sight of both eyes.

The recovery of this patient, left entirely in the hands of ignorant negroes, with no one to dress the wound or to see after cleanliness except them, seems remarkable to me. It is true I did my best to impress upon them the importance of good attention and thorough cleanliness. The wound was cleaned every day with solution of bichloride of mercury and dressed with bichloride gauze.

## **Two Cases of Unilateral Sympathetic Irritation in the Eye.**

By M. FEINGOLD, M. D., New Orleans.

In presenting this paper to you I am fully aware of the fact that all of you have observed the symptoms spoken of herein time and time again in a disease very common—Basedow's disease. There would, therefore, be no reason for my bringing these two cases to your attention, but for the fact that the eye-symptoms, or rather some of those usually concomitant with Basedow's disease, were one-sided only, while the classical picture of that disease will always present the eye symptoms consisting of exophthalmus, wide lid-opening and retarded lid-movements on *both* sides. This train of symptoms is according to this commonly accepted theory due to an irritation of the neck-sympathetic which by contraction of Mueller's muscle in the fissura orbitalis inferior, forces the eyeball out of the socket, thus producing exophthalmus and to the contraction of the non-striated muscle fibres in the upper lid, thus raising it and augmenting the staring expression of the Basedow patient. I shall not here discuss the theory of Basedow's disease, and mention only that rare cases of this disease have been observed in which the eye-symptoms were one-sided only; but my two patients showed no other of the characteristic symptoms of this disease. To what agent these symptoms in my patients are due, I am unable to state; no struma or enlarged gland of any kind could



Dr. Feingold's Case.





be detected on the neck of either one, where one would naturally look for a cause of the irritation of the underlying neck sympathetic. One thing both patients had in common: suspicion of tuberculosis. Is one of the deep glands near the ganglion cervicale affected by this trouble and giving note to this peculiar irritation of the eye-branches? I can not affirm or deny this, but the subsequent disappearance or lessening of the symptoms would certainly lead one to think that some form of inflammation or pressure near the neck sympathetic had diminished immensely or had entirely disappeared. And now to the cases:

Miss E. L., age 22, was referred to me in January 14, by Dr. Elmore, for treatment. She gave the following history: since a few days she sees things very blurred, and sees double when looking to the right which annoys her very much. History as to diphtheria or any other recent disease negative.

Status praesens: A. Eyes. Both eyes move freely in all directions; upper lids of either side normal in movements with the bulbus, only the right one seems to stand slightly higher than the left and opening between lids is somewhat wider than on left side. Vision  $\frac{5}{4.5}$  r. e., same in l. e.; near point normal. Right pupil slightly wider than l. one; good reaction for light and accommodation. Fundus and media normal. By the aid of the ophthalmometer it could be established that the right bulbus is slightly more prominent than the l. one. Examination of the eye-muscles brought out the fact that the double vision was due to an insufficiency of the rectus superior of the r. eye; the double vision being most distinct on the right side and the image of the r. eye being higher than the one of the l. eye.

B. Body. Pulse 90, Temperature normal. No struma or enlarged glands on the neck can be found. Heart normal with the exception of the tachycardia.

The diagnosis I made on that day was irritation of the sympathetic on the right side of neck and based it on the exophthalmus, wider pupil, wide lid-opening, insufficiency of the eye-muscles due to the displacement of the bulbus, and the tachycardia. Accordingly I forbade all exertion, and ordered thyroid tablets. This was continued for some time. Patient's sight improved steadily, the double vision bothered her less and less, she only complained of not being

very strong some times, the reason for which lay in an irregular slight elevation of temperature (up to  $99^{\circ}_5$ ). From the temperature chart, kept for weeks, malaria could be excluded. In the chest only slightly roughened inspiration on both sides with no rales allowed of no positive diagnosis. Upon closer examination I elicited the statement of a cough that bothers her occasionally. No sputum could be obtained for examination. At present the patient complains no more of her eyes; double vision has disappeared entirely, she has gained in weight, looks splendid. Only her frequent pulse still persists.

The other patient offered a much more striking appearance, the symptoms being far more pronounced, so much so that they can be seen distinctly on a photograph taken for that purpose. In November, '03, Miss. L. E., whom I had treated about 7 years ago for cough and hemoptysis, called on me with the complaint that for the last week her r. eye had been getting smaller, thus producing a peculiar funny expression of her face, over which she had to stand a whole lot of teasing at home. A superficial examination enabled me at once to contradict her statement positively, and to tell her that it was the l. eye that was getting "bigger" and not the r. one getting smaller. The symptoms were so pronounced as not to be mistaken and practically everything can be read from the photograph. You will observe that the opening of the lids is wider on the left side to such a degree as to leave the upper margin of the cornea and a small band of sclera above the cornea uncovered. On the skin-surface of the lid you will notice that the fold produced by the loose skin above the region of attachment of the levator is much heavier on the affected side, indicating that contraction of the organic muscle fibres has allowed the loosely attached skin of this part to hang over and seemingly produced a deeper wrinkle than normal. On the picture representing the patient looking down the effects of the spasm of the muscle fibres are still more plainly seen if that be possible. The opening between the lids is in this position about twice the size of the one on the r. side, because the upper lid was prevented from following the eye-ball in its movement downward. Again the wrinkle on the affected side is more pronounced.

The other eye: status is identical with status of three years ago, when I prescribed glasses for the patient R.  $+0.5$  cyl. ax.

90 $\frac{5}{45}$ ; L. +0.5 cyl. ax. 90 $\frac{5}{45}$ . Slight insufficiency of the recti interior. Fundus normal. On the neck, no struma or enlarged glands. Temperature normal, pulse 72. No difference of temperature, color or perspiration in both halves of the face. I prescribed thyroid-tablets and bromide of soda.

At the subsequent visits the affection presented a varying appearance more pronounced at times and less at other times. The patient voluntarily stated that when worried or otherwise excited the "game" lid would go up. No influence of the menses could be detected. Gradually the very disfiguring affection lessened in its intensity and is almost imperceptible to-day. Had the affection been persistent or increasing, I intended to propose the removal of the superior cervical ganglion of the sympathetic, which would give a small and easily concealed scar on the neck in place of the very disfiguring expression of the face.

#### DISCUSSION.

Dr. H. D. BRUNS, of New Orleans: I have always had great reticence in bringing special subjects and the discussion of them before this Association. I realize perfectly well that such cases are of interest to a very small proportion of this body and I can not but sympathize with others when they are forced to listen to technical papers in which they have no interest, therefore, I shall try to be brief in my comments on the papers read.

I think the paper of Dr. Harrell on dacryocystitis is very complete. The disease appears only slight and of no consequence when we have it not ourselves, but it makes the patient miserable. Whenever there is overflow of tears the patient should be treated with the most mild and gentle remedies and if after a certain length of time there is no improvement it will be wise to refer the patient to a person who treats these troubles specially because the old treatment which used to be very emphatic and meddlesome is passing away and being replaced by more intelligent, conservative and thorough methods. If the truth were told I believe the old methods have done more harm and caused more trouble and damage than they ever did good. Everyone in my hearing knows how easy it is to do damage with the ordinary sound. When you have to pass a thin, extremely delicate sound down into a small canal enclosed on all sides with bone, scraping the mucous mem-

brane from the bone surface is the easiest thing in the world and the moment you do that you have done irreparable damage, because you lay foundation for an organic stricture which can never be cured, but only dilated from time to time and relief given as long as the dilatation will last. Fortunately to-day we have a remedy, just introduced to the profession, of such chemical and physical character as to promise much which anyone can try for a certain length of time in cases of lachrymal trouble and feel that he is not doing harm. I refer to argyrol solution. If you put a drop on the tissues it diffuses itself everywhere. If you put a drop in the normal eye and after a while blow the nose it will be seen on the handkerchief. If, therefore, there be any hope of treating the disease without any special knowledge, the treatment by instillation of a drop of 1-1000 adrenalin, applied a few minutes before the application of argyrol, so as to render the parts bloodless and favor the passage of the argyrol into the puncta, is the safest and best general treatment. If the disease does not yield to that it needs some special knowledge to treat it.

As to the various causes, peculiarities, difficulties, etc., in treating these cases I would say in a case of lachrymal obstruction, be sure first of the condition of the nose. I invariably before entering upon the treatment of such a case send the patient to one of my confreres who is an expert in that class of trouble, and have a written statement that the nasal cavities are normal, or that he has been able to put them in a normal condition. When that is done if the trouble does not disappear then it is time to enter upon treatment of the trouble itself. If there is no relief of the symptoms then try the adrenalin and argyrol treatment. If there is any displacement of the lid whatever it is needless to try to relieve the disease unless the lid can be replaced for the slightest displacement of the puncta invariably leads to this trouble.

Passing to the paper read by Dr. Thornhill, the case is very interesting because it adds one more to that curious catalog of cases where the optic nerve has been cut by a single bullet. With so many different parts of the body to hit it is curious to know how often the ball cuts the optic nerve, doing no other damage than leaving the patient stone blind. In the case of gunshot wound of the eye the main point is the excellence of recovery in the absence of any proper care whatever. It is curious to see how often the



eye will recover from lesions which seem to threaten its whole vitality, while other cases, very small and insignificant injuries apparently, go on to suppuration and bring about complete destruction. Youth and first-class physical condition are two of the factors which most often influence the result.

The cases narrated in Dr. Feingold's paper are exceeding interesting. I have been practising now twenty-one years and most of the time in large hospitals yet I have never seen one of these cases. They must be uncommon and they should be of great interest to the general surgeon and practitioner by presenting a group of symptoms pointing to a trouble of the sympathetic nerve which might be passed unnoticed but for them.

DR. R. W. SALTER, of New Orleans: What are we to do with the laboring classes, especially those who are engaged in mechanical pursuits, suffering with the chronic form of dacryocystitis? These people are frequently exposed to injuries from foreign bodies and abrasion of the cornea, and this condition of the lachrymal sac being present they are constantly in danger of losing their eyes from infection of the cornea. The foreign ophthalmologists urge extirpation of the sac in these people. The conservative treatment often fails in this class, and we find them going from clinic to clinic. Extirpation of the sac seems to be the best method in this class. Probing is a slow process, and the slowness with which the symptoms disappear causes the patients to become discouraged and seek other aid or if they continue they are taught to use the probe, so that they can probe, probe the rest of their lives.

DR. M. FEINGOLD, in closing: The greatest difficulties we meet are in cases of pure epiphora, while the cases of dacryocystitis usually get well in a way after opening the abscess, probing and washing out with a solution of nitrate of silver, the patient returning only occasionally to see that the canal does not close up. As to the importance of examining the nose I will say that in a good many of my cases a one-sided condition of the trouble has at once suggested trouble in the nose, but in cases of real epiphora we find little trouble in the nose, and we can not positively lay the blame upon the conditions in the nose every time for the persistent tearing. As to the treatment with argyrol I must admit that I am a warm advocate of it. It is an exceedingly valuable drug in acute puru-

lent conditions but it has one peculiarity that I have not seen mentioned anywhere and that is that in some eyes it will produce a thin filament of phlegm which has the effect of a foreign body and causes irritation; but this is not very common.

I can not exactly understand the point in Dr. Thornhill's case as to the ball passing under the bridge of the nose. Did it pass under the skin or through the nose into the other orbit? If it had passed beneath the skin it would be difficult to understand how there was enough force to cut the optic nerve.

In regard to Dr. Hamner's cases I have had a similar experience. Recently a patient asked me about the advisability of wearing a glass eye. He told me that when a boy of about 6 or eight years he was struck on the eye with a stick, and the eye burst open and began to suppurate. His mother took a pair of scissors and cut the eye out.

DR. F. M. THORNHILL, in closing, said in regard to the course of the bullet, that it passed beneath the bridge of the nose (the bony structure).

---

## Orleans Parish Medical Society.

---

*President*, DR. M. J. MAGRUDER.

*Secretary*, DR. S. M. D. CLARK.

163 University Place, New Orleans.

---

MEETING OF MAY 14, 1904.

DR. MAGRUDER, President, in the Chair.

DR. SEXTON read a paper entitled:

### Remarks on Empyema.

By DR. L. SEXTON, New Orleans.

Empyema, or purulent pleuritis is of more common occurrence than most physicians imagine; in fact it is the cause of many deaths attributed to unresolved pneumonia where the lung it is claimed fails to clear up, or pressure from pleuritic effusion causing

heart failure. I have heard these explanations given when the entire matter could have been cleared up by a simple puncture of a large hypodermic needle. The usual causes of empyema are (1) The degeneration of sero-fibrinous pleuritic effusion, which, even when it clears away, contains some corpuscular element which increases in number, especially if a non aseptic thoracentesis has been performed, rendering the clear serum of a milky color which latterly turns to pus; (2) Empyema also follows scarlatina, and all the eruptive fevers, pneumonia, tuberculosis, pyemia, and again its cause may be traumatic, through the chest as the fracture of ribs or penetrating wounds either stabbed or gun-shot. The usual bacteria found are the staphylococcus and streptococcus and tubercle bacillus, the diplococcus (least serious), pneumococcus is usually found after pneumonic cases. If, after any of these conditions enumerated above we have pains, cough and expectoration with dyspnea, with diurnal chills, and paroxysms of sweating, dullness on percussion which changes with upright position, absence of vesicular murmur, a bulging of the intercostal spaces, with tendency to lay upon the affected side, all these conditions point either to pleurisy with effusion or more likely to empyema. The only positive method of determining which it is, is by exploratory puncture, which, when done with an aseptic needle, trocar, or hypodermic puncture, is usually harmless, and painless as well, especially if preceded by an injection of cocaine, or chloride of ethyl spray. Flocculi of fibrine often block up the end of the needle so that a pleural cavity full of pus may give a negative result, from hypodermic, or, if the pus is very thick it may fail to be drawn through a small needle, yet as a rule we do not have much difficulty in establishing our diagnosis even with the large hypodermic syringe and needle. The prognosis in these cases is usually grave, but the outlook will be modified by the character of the bacilli, and the early diagnosis, with thorough drainage of the cavity. Age again modifies the prognosis, as the prospects among children are much more favorable than among adults. Phthisis pulmonalis, or pericarditis, peritonitis, septicemia, when complicated with empyema as a matter of course add to the gravity of the situation very materially. Again, left-sided empyema is much more fatal owing to the involvement of the pericardium or displacement of the heart. Out of 656 cases collected by Weightman in English hospitals,

among children over three years of age, sixteen per cent. proved fatal, under the most approved treatment, including drainage and rib-resection when indicated. The same statistician found the mortality to be fifty per cent. in children under three years of age; the mortality rate was also very large in old people. The treatment of empyema is purely surgical. An early diagnosis with free incision and drainage is the teaching of all competent men upon this subject. The variety dependent upon the pneumococcus may possibly be cured by aspiration or absorption, in fact such a course has been recommended of late by some French writers; but the question naturally arises, why risk a life upon the name of a germ when we know other simple methods will almost surely afford relief. Our plain duty in all cases of empyema as in an abscess is to remove the pus and keep the drainage open, to secure expansion of the lungs, and to prevent deformity. Aspiration should only be relied upon as a temporary make-shift in urgent cases, with effusion upon both sides, and when the fluid is sero-purulent, even if aspiration is often repeated, there is left in the pleural cavity cheesy masses and flocculi of fibrine which can not be removed by the aspirator. A large size trocar and canula which fits aspirator should be used if we aspirate in preference to the usual sharp-pointed needles, which might inflict unnecessary damage upon the lung or pleural membrane if inserted too far. The fluid is sometimes syphoned away by slipping a rubber tube over the nozzle of the trocar, allowing it to fill with fluid and placing the lower end in basin of sterilized water. In children it will be found that usually there is plenty of room for drainage between the ribs, without having to resort to resection of the rib, which adds materially to the shock of the operation, besides opening the cancellated structure of the ribs, making pyemia and necrosis more probable. If the interspace between the ribs is not large enough to permit free drainage, resection then becomes necessary; but we have usually gained sufficient space by increasing the length of incision between the ribs, putting in two or three large rubber tubes, one inch long, held together by a safety pin. These tubes should not extend far into the pleural cavity as they irritate the lung if too long, or much beyond the chest-wall externally, as they prevent the dressing from lying smoothly if too prominent externally. It is time to remove the tubes when the discharges change from a purulent to a serous



fluid and become very scanty in quantity. This may be the case in from ten to twenty days, but oftener it takes as many weeks. The opening may be kept from healing after the tubes have been removed by a slight packing with iodoform gauze. In operating upon a child under three years of age a single large drainage tube is usually sufficient, but two and sometimes three of these tubes are necessary in adults. The pleural cavity can be more completely emptied by frequently turning the patient upon the affected side, thus causing the fluid to gravitate towards the opening and to be discharged more freely by efforts at coughing. The patient should be encouraged to sit up, if strong enough to do so at the end of the first week. Pulmonary expansion can be increased by instructing the patient, in blowing into Wolf bottles. These cases are rather slow in convalescing. The average length of time usually runs from seven to eight weeks, but many are much more protracted. This is usually the case where the cause is tubercular or where debris or large coagula are found in the pleural cavity. Under such circumstances the incision should always be made larger and this detritus removed by gentle douching the chest cavity with sterilized water a little above the normal temperature of the body. This procedure with efforts at coughing will usually wash out these foreign substances. Irrigation of the pleural cavity should not be resorted to with impunity as fatal collapse has followed this procedure. No antiseptic or disinfectant should be added to the douche, unless the discharge is particularly offensive from gangrene of the lungs or decomposition of the pleural membrane. Under such circumstances mild solutions of boracic acid or bichloride of mercury, one to ten thousand, can be employed, but an injection of sterile water should follow. I have recently operated on two cases of empyema following pleuro-pneumonia, or grippe-lung, following out the plans indicated in the preceding remarks with results eminently satisfactory. The temperature in each case ranging from 103 to 104 F. with all the physical signs of empyema. After spraying with ethyl chloride or giving the local anesthetic the side was given a thorough aseptic scrubbing with bi-chloride solution, the tubes and instruments were also rendered aseptic by thorough boiling, an incision was made about two inches long in the seventh intercostal space in the axillary line. The skin was pulled up so as to form a valve-like opening after the tubes had been

removed. The index finger was pushed into the incision to determine whether the rubber tubes would be collapsed by rib pressure or not. The pleural membrane was opened for about an inch and a half, when about two quarts of pus flowed very freely, spurting out in jets after each effort at coughing. The cavity was kept as thoroughly empty as possible by encouraging the patients to lie on the affected side. The wound was then covered over with iodoform gauze, and several layers of absorbent cotton to take up the fluid, which were changed as often as necessary. These cases had a fall of temperature from 103 to normal within four hours after the operation, and made an uneventful recovery after five to six weeks confinement. We do not mean to reflect upon those who advocate rib-resection in order to get freer drainage in adult cases. In fact, we rather think it indicated in such cases where the drainage is not entirely free, but in younger subjects, and in children especially, who are very often much shocked by the operation, we rather incline towards the use of the drainage tube than to the more formidable operation. It has seemed to me that the teaching of many of the text-books has been too radical in regard to immediate resection of the ribs in nearly all cases of empyema. As a matter of course, we know free drainage is imperative in all abscesses, but it does not necessarily follow that you cannot get this by opening the seventh intercostal space instead of the sixth, by making the incision longer between the ribs, and having the rubber drainage tubes larger. The sharp edges of the cut ribs, the bleeding from the intercostal artery, the shock all argue against rib resection, unless the lung has been permanently retracted by the pressure from the fluid and there is a large amount of dead space when either Easterlander's or Scheede's operation may become necessary. One thing that has convinced me of the evils of rib resection, has been the numerous cases of sinuses I have seen in the clinic on account of necrosis after resection. I think counter openings equally unnecessary if the first incision is at lowest point for drainage and large enough, there is rarely any indications for but one opening.

In the month of January I was called to see a little patient about six years old, who had been suffering from la grippe or perhaps pneumonia, and its effects, for six weeks. I was the fourth doctor in the case, and found the patient very much spoiled from

his long spell of sickness, and having his own way. The temperature was 103, sweats profuse, respiration 36, pulse 120. The little fellow was so irritable that it was almost a physical impossibility to auscultate or examine him. After stripping him I saw the respiratory act was confined to the right side, also that the intercostal spaces were less marked on that side. Breath sounds were absent. Flatness was complete. I recognized at once that the pleural cavity was filled, and suggested that drainage be established at once. It was with some hesitation that I got the consent of the parents to operate. After aseptically cleansing the side, and cocainizing, I made the puncture with a trocar needle between the sixth and seventh ribs in the axillary line. The pus came through before I could attach the syringe. I used the needle as guide to enlarge the opening with knife, when one quart of pus escaped. The lung was compressed up into a small space in the upper portion of the thorax. The child was not shocked by the incision which was painless. A medium sized rubber tube was inserted, with a safety pin through one end to keep it from slipping into cavity. A large pad of absorbent cotton was placed over the tube; a bandage thrown around the chest, and within twenty-four hours the fever was gone. As the lung expanded I cut the tube shorter, until it was finally forced out. I did not irrigate, just drained. The result was perfect within three weeks. In children, and where there is good space between the ribs, I do not think resection required.

#### DISCUSSION.

DR. WALET spoke of the importance of properly placing the drain in these cases. He thought that at the time of the operation, when the chest was distended, there was a tendency to make the opening too low down. He had seen incisions drain perfectly well when first made, but subsequently, when the diaphragm was restored to its normal position the tubes failed to properly drain. He related one case in which the water when carried into the cavity with a rubber catheter or tube failed to return, and recourse was had to a non-compressible recurrent catheter to overcome the pressure of the diaphragm. The sixth intercostal space was the best point to make the incision.

DR. GESSNER said that the subject was one of great importance,

and one that was especially interesting to him. He wished to take exception to the remarks of Drs. Walet and Sexton in reference to irrigation, he having been taught that as a general procedure it was to be avoided. He related a case of gunshot wound of the chest ending in empyema, in which he employed irrigation. While irrigation was going on the patient complained of inability to see and fell back in a recumbent position; his pupils became widely dilated, and no pulse was perceptible; respiration also failed. By vigorous restorative measures, prominent among which was artificial respiration, the patient was made to react, and finally recovered. He thought that the distressing symptoms in this case were due to nothing but a pleural reflex inhibiting the heart's action. Irrigation as a routine measure, he thought, should be avoided. Dr. Sexton had not spoken of the tuberculous type of empyema; in this variety of pleural infection he regarded it unwise to open the cavity, which lays it liable to other infection. In making the incision it was well to guard against its being made too low, the fifth intercostal space being the point of election. In reference to rib resection, he thought that the bad results were due to "botch" work done on the periosteum. As a rule, instead of completely dividing the periosteum, many simply scratched its surface and tore it into small shreds, this resulting in necrosis of the exposed ends. The cut should be made in the periosteum directly against the bone; then with Musseau's periosteotome the periosteum should be separated in its entirety, and by means of a gauze strip further pushed away from the bone.

DR. LANDAUER said that necrosis frequently followed rib resection in empyema, and that it was a point of value to suture the periosteum over the end of the rib. The self-retaining tube was of value in drainage.

DR. SMYTH had no personal experience in treating empyema. He spoke of a case of tubercular empyema in which Dr. Loeber had made a free incision, ending in a cure. Having no experience, he could add nothing to the remarks made by the preceding members.

DR. MCGEEHEE, SR. As most men in the profession, had seen and treated cases of empyema. He related a case of subphrenic abscess resulting in empyema that had recently been of unusual interest. On the *left* side of the chest there was distinct evidence



of pus accumulation, which was relieved by the resection of two ribs, irrigated, and there was no suspicion that the diaphragm was perforated until several days after the operation, when the exploring finger revealed a hole, which led through the diaphragm. It seemed to originate from an abscess in the upper posterior part of the left lobe of the liver. He spoke of the Gigli saw being the ideal instrument in rib resection, in avoiding the traumatism necessarily inflicted by means of crushing instruments.

DR. WALET did not think that irrigation was wise in every case, but in some it was absolutely necessary. In some the double current catheter should be used, so as to avoid internal pressure, which, if absent, he thought would be accompanied by no untoward symptoms.

DR. MAGRUDER mentioned the great importance at arriving at an early diagnosis. Many of these cases were brought to the surgeon after they had grown weak, depressed and gradually wasted away from a continual fever, due to septic infection.

DR. SEXTON, in closing the discussion, said that he thought that the point of early diagnosis was an important one. Inspection was a valuable aid, also auscultation, in making a diagnosis, but the aspirating needle was the only positive method to rely upon. He did not recommend irrigation, except where there were flocculi of fibrin and evidences of degeneration of the pleural membranes. He had met with one case of gangrene in the pleura, in which pieces slough away, and in such cases it was impossible to get along without irrigation. Multiple tubes should be used in order to be positive of a good return flow. If the incision was made at the sixth rib, one gets well above the diaphragm, and if the tube was not too long there would be no irritation. He was glad that Dr. Gessner mentioned the tubercular type, for it recalled a case in which such a diagnosis had been made and operation was not advised. The patient had a temperature of 105 and upon calling a consultant, they both agreed that it was not wise to open the chest walls and lay the patient open to further infection. This case went to an adjoining city, where the pleural cavity was drained two years ago, and the patient is living now, though still in a critical condition. He could not understand why an exception should be made in the tubercular variety of cases, for he was a firm believer that wherever there was pus it

should be drained. He thinks now that it would have been better to have drained this case above mentioned. He had frequent cases of necrosis referred to his out-door clinic, and he believed that rib resection was done a little too freely, it opening channels for infection in the divided rib, and in many cases drainage can be accomplished without rib resection, especially in young subjects.

DR. MILLER read a paper entitled "Primary Carcinoma of the Vagina; Report of a Case."

See JUNE JOURNAL, page 886.

#### DISCUSSION.

DR. VAN WART mentioned a case of ulceration of the vulva in a patient aged 79. The patient was admitted to the Bay View Asylum in a moribund condition, so that no examination was made during life. The autopsy held 12 hours after death showed a senile uterus and appendages, with no vaginal or cervical ulceration. The ulceration externally involved both the labia majora and minora and surrounded the anus. Microscopical examination showed a slight chronic inflammation. There was no evidence of thickening of the vessels. There was no evidence of new growth in any part of the edge of the mass. The case was interesting from the pathological standpoint, as a careful examination had left the matter still in doubt.

DR. LEMANN said that it was quite difficult to make a differential diagnosis in the lower third of the vagina, between tubercular, chancroidal and syphilitic lesions. He had recently had a case in his clinic of interest, that of a negro woman with an annular ulceration in the lower third of the vagina extending upward. He thought it syphilitic, and under hypodermic injections of one-sixth of a grain of bichloride of mercury three times a week, it was clearing up rapidly. He thought Dr. Miller's case of interest, owing to the rarity of carcinoma occurring primarily in the vagina.

DR. PERRILLIAT said that Dr. Miller's case was of interest, because as a rule primary carcinoma of the vagina usually occurred in the posterior wall, his case appearing upon the anterior. An important point was a systematic examination of the vaginal walls in all gynecological cases.

DR. MILLER, in closing, mentioned the difficulty in making a correct diagnosis in many cases of ulceration about the vulva and vagina, and how easily a beginning malignant growth might be classed as benign, or vica versa. Dr. Barton C. Hirst had recently written a paper dealing with the differential diagnosis of such conditions, and his paper would no doubt be valuable to everyone seeking information along this line.

MEETING OF MAY 28, 1904.

DR. MAGRUDER, President, in the Chair.

DR. MAES read a paper entitled

**Personal Observations with Nitrous Oxide and with Ether Anesthesia, Based Upon 555 Cases.**

From the literature on the subject of General Anesthesia, we are certainly not able to come to any definite conclusions as to the choice of an anesthetic in major surgical operations. From time immemorial this has been a fruitful source of discussion among surgeons, as evidenced by the numerous mixtures which have been put forth at various times, such as, the old A. C. E. Mixture, Schleich's formulas, this latter mixture containing petroleum ether, which addition is meant to lower the boiling point, or evaporating temperature of the combination, thus hastening elimination. Willie Meyer has more recently given us another ingenious mixture known as anesthol, based on somewhat the same principles; and, again the various combinations of Nitrous Oxide with oxygen, chloroform and ether have proved satisfactory to some, while others have views just as pessimistic about these.

The recent articles that have appeared in some of our journals, for instance, one by Mellish, in the *Journal of the A. M. A.*, Dec. 5, 1903; one by Pedersen, in the *Medical News*, February 6, 1904, and one by Prescott LeBreton of Buffalo, *New York and Philadelphia Medical Journal*, February 13, 1904, and lastly, a plea for more local and less general anesthesia by Webster of Chicago, in the *Journal of the A. M. A.*, April 23rd, 1904. While some of these writers, as Pedersen, are satisfied with one method, ( $N_2 O$  and oxygen for minor operations), the chief inference to be drawn is that a safe and reliable general anesthetic is still a desideratum.

During the early part of my term of service as Resident Surgeon

of the Touro Infirmary, chloroform was the preferred anesthetic, but there were so many cases where the patient was at the edge of a precipice, that marks the danger line, that we concluded to try the then new mixture of nitrous oxide and ether. Ether alone was not considered, as some former experience had not been pleasant, and where the anesthetic was entrusted, as it is in most instances, to an ever-changing staff of internes, it is almost impossible for them to become thoroughly familiar with any special procedure. The gas and ether mixture was first used by the writer on March 15th, 1902. Our first attempt was made with a cumbersome dental apparatus, for the administration of the gas, and then rapidly shifting the mouth piece and replacing it by an Allis Inhaler, saturated with ether. The disadvantage of this soon became evident. The patient had to be brought to an appalling state, with cyanosis, as its most prominent feature, and then "choked" with ether. This usually resulted in a profuse bronchorrhea, so that the patient had to be given less ether, would wake up, vomit, and have to be etherized again. However, the few satisfactory cases with this cumbersome apparatus encouraged further investigation of the subject and a Bennett Inhaler was procured. Such satisfaction and sense of security has been obtained by this, that the senior surgeon of the above institution once remarked to me that he would feel lost without it. The Bennett Inhaler came into use in the early part of April, 1902, and being desirous of becoming thoroughly acquainted with the technique, I took personal charge of the anesthesia of some few succeeding cases. I soon learned the uselessness of fully anesthetizing a patient with gas, and then rapidly changing to ether, and so on my fourth case resorted to what may be known as the gradual transition, that is, slowly changing from gas to ether. After one or two inspirations of gas, the ether chamber is gradually opened and a mixture is given, increasing the quantity of the latter until the patient inhales pure ether. This is the method now in vogue, and is identical with the procedure reported by Pedersen in the *Medical News*. The Average time required to anesthetize a patient being from three to five minutes. Some twenty cases of my series required a longer time, even to fifteen minutes. But in these the patient became excited, could not be



controlled with gas, and it became necessary to administer pure ether.

From a series of 555 cases, from March 15th to December 31, 1903, inclusive, in which the mixture was given, it became necessary to change to choloroform ten times, on account of profuse bronchorrhea or cyanosis. I append a table of thirty-five cases, which may be taken to illustrate results, or, rather, as a type of this series. In the table are included some of the cases that did not respond to the mixed anesthesia as we should have desired, and may prove instructive to some.

Having become impressed with the small amount of ether necessary in most cases, I had a record kept of the quantity used in a parallel series of 50 cases, and found the saving to be 52 per cent. This is certainly greatly in the patient's favor. A word of caution, however. Most cases may be kept in a state of surgical anesthesia for a limited time by allowing them to inhale their own exhalations from the bag attached to the inhaler. This requires great care on the part of the anesthetist, and is a procedure fraught with danger in careless hands, but very serviceable when it is necessary to minimize the amount of ether used.

It may be well to add in this connection, that in the entire series (555 cases) there were four cases of post-operative pneumonia, all being rather mild and yielding to the ordinary modes of treatment.

Case No.	Pulse before Anæsthetic.	OPERATION.	Pulse After Operation.	POST-ANÆSTHETIC OBSERVATIONS.	REMARKS.
1	78		96		
2	80	Amputation of breast (Meyer-Halsted) .....	76	Post anæsthetic, nausea slight Vomited frequently during first 24 hours .....	Anæsthesia uneventful. Patient was very stout and had profuse bronchorrhœa during etherization. Anæsthesia uneventful.
3	100	Excision of rectum (Tuttle-Whitehead) .....	100	Vomited first 6 hours .....	
4	112 (excited)	Nephropexy (Edebohls) .....	84	No post anæsthetic, vomiting.	Pulse lost in volume during anæsthesia.
5	100	Tubercular synovitis of knee aspirated, irrigated and plaster cast applied .....	110	No post anæsthetic, vomiting.	Expistaxis and cyanosis.
6	96	Appendectomy .....	80	Slight nausea .....	Anæsthesia uneventful.
7	120	Nephropexy .....	104	Slight nausea .....	Anæsthesia uneventful.
8	84	Lumbar hernia (post operative) .....	90	Nausea 8 hours .....	Bronchorrhœa severe.
9	100	Salpingo-oophorectomy duplex and appendectomy .....	108	Nausea 6 hours .....	Slight Bronchorrhœa.
10	112	Curetment .....	106	No nausea .....	Slight Bronchorrhœa.
11	100	Vaginal hysterectomy .....	112	Nausea insignificant .....	Anæsthesia uneventful.
13	100 (intermittent)	Appendectomy .....	120	Slight nausea .....	Large quantity of ether necessary. Patient had mitral and aortic lesions. Nausea and retching very distressing.
15	110	Hæmorrhoids, ligature and cautery .....	100	Cyanosis marked, vomited during anæsthesia .....	Nothing noted.
16	110	Curetment .....	100	Large quantity of ether necessary .....	
17	100	Appendectomy .....	110	Anæsthesia uneventful .....	Transient nausea.
18	60 (weak)	Salpingo-oophorectomy dextra appendectomy .....	70	Pulse improved during anæsthesia .....	
19	88	Ventral hernia (post operative) .....	90	Change to chloroform necessary on account of bronchorrhœa and cyanosis .....	Transient nausea. Vomited 24 hours.

Case No.	Pulse before Anæsthetic.	OPERATION.	Pulse After Operation.	POST-ANÆSTHETIC OBSERVATIONS.	REMARKS.
20	112	Osteotomy (Tibia) .....	104	Anæsthesia uneventful .....	Not nauseated.
21	92	Secondary suture abdominal wound (suppurating appendix) .....	94	Anæsthesia uneventful .....	Not nauseated.
22	106	Excision of rectum (Tuttle-Whitehead) .....	96	Pulse improved during anæsthesia .....	Slight nausea.
23	150 (excited)	Nephropexy (Edebohls) .....	110	Cyanosis marked, vomited .....	Nausea and vomiting 24 hours.
24	92	Amputation of breast (Meyer-Halsted) .....	60	Anæsthesia negative .....	Vomited 8 hours.
25	84	Tubercular epiphysitis of radius excision .....	88	Profuse bronchorrhœa .....	Not recorded.
26	96	Curettment .....	100	Easily cyanosed with CO <sub>2</sub> narcosis .....	No nausea.
27	80	Splenectomy .....	80	Vomited .....	Vomited 12 hours.
28	80	Curettment .....	120	Change to chloroform on account of cyanosis .....	Vomited 8 hours.
29	100	Inguinal herniotomy (Bassini) .....	80	Change to chloroform on account of cyanosis .....	Nausea and vomiting 8 hours.
30	80	Hemorrhoids (lig. and cautery) .....	88	Change to chloroform on account of cyanosis .....	Nausea slight.
31	80	Hepatic abscess, excision of rib .....	88	Anæsthesia uneventful .....	Nausea slight.
32	104	Osteotomy (Tibia) .....	102	Change to chloroform, cyanosis .....	Not recorded.
33	100	Cholecystotomy .....	90	Uneventful .....	Vomited twice.
34	96	Abdominal hysterectomy .....	138	Uneventful .....	None.
35	100	Appendectomy .....	96	Uneventful .....	None.

The above table has been prepared from thirty-five cases, and the record will show some of the advantages as well as the disagreeable features of this mixed anesthesia. The average time to induce complete anesthesia has been from three to six minutes. The pulse in most cases improved under ether, and in only one, No. 34, was there an increase of rapidity, of any consequence.

This was an abdominal hysterectomy for an adherent intramural fibroid, an operation necessarily accompanied by a great deal of shock. A complete analysis of the cases in the table is not given here, as I have gone over them in substance elsewhere, and have only endeavored to bring out the salient features, and those which may be compared with other forms of general anesthesia. Noticeable facts are the effect on the pulse and post-anesthetic nausea as well as the comfort of the patient, and anesthetist in the early stages, the characteristic struggle being avoided.

Beside the above tabulated cases there were in the series, as stated above, five hundred and twenty-seven, and a change from ether to chloroform was found necessary in seven cases, on account of bronchorrhea or cyanosis, which latter was present chiefly during the continuation of anesthesia, with the patient's own exhalations from the rubber bag of the inhaler. This number embraces all cases and severity of operations which may be briefly stated, as follows:

Amputation of breast.....	5
Amputation of extremities.....	2
Laparotomies .....	50
Herniotomies .....	21
Osteotomy .....	19
Excisions of rectum.....	3
Nephropexy .....	4

The rest being operations usually seen in hospital practice, such as, for hemorrhoids, excisions of glands, cystotomy, (perineal and supra-pubic), hydrocele (radical operation), sinuses curetted, tumors excised, and the usual run of gynecological operations, (laparotomies being in the above list). The extremes of age, as will be noticed in my list of objections, are, of course, eliminated as time and experience have always shown chloroform to be the anesthetic of preference when surgical intervention becomes nec-



essary in this class of patients.

For fear that my impressions may seem too optimistic, I will enumerate a few of the most prominent disadvantages:

1. The apparatus is expensive and cumbersome, is difficult to transport, consequently its greatest field of utility is in institution practice.

2. A certain amount of skill and dexterity are essential, and it requires some training to master the technique.

3. Some patients become excited to the extreme with the laughing gas, and these are especially difficult to manage; such a patient becomes more difficult to etherize than if the gas had been withheld altogether.

4. Bronchorrhea is sometimes annoying, but is no more serious than doing plain etherization.

5. Cyanosis is a disagreeable feature of the gas, sometimes persisting throughout the anesthesia, especially when carbon dioxide narcosis is attempted. This feature can usually be avoided by the gradual transition, which procedure requires very little gas, usually less than the contents of one three-gallon bag.

6. The effect of the gas on the circulation and respiration, is a transitory acceleration of both. These functions soon become restored to their normal equilibrium when the patient is given some ether and the period of "gas excitement" is passed.

7. Vomiting early from ether is a most disagreeable feature, and when this occurs the process has to be begun anew, as the patient usually rouses, and the same objections hold good as in No. 3.

8. The position required for some operations is a serious consideration. In the Edebohls and some other positions, where the patient is not on his back, the apparatus is hard to manage, and some simpler inhaler has to be used. The same objections are tenable in operations about the head and face, and, as previously mentioned, the method is not suitable to the extremes of age, for the same reasons that ether alone is not given in these patients.

In conclusion, I wish to say that from my experience with the gas and ether mixture, I find its greatest field of utility to be in the adult subject, especially those highly neurotic individuals that give a great deal of trouble to the anesthetist, on account of fear alone, and wherever we have found ether preferable. The

absence of the second stage, or period of excitement, being the feature specially to be commended.

#### DISCUSSION.

DR. PARHAM was very much interested in Dr. Maes' paper, and thought it a valuable contribution. He had employed it in six or eight cases at the Sanitarium. In many cases he thought it a very pleasant and satisfactory anesthetic, but in others, especially fat people, found it an apparently dangerous procedure, the gas being especially dangerous. Bennett himself mentioned certain cases in which this method was not suitable. Personally his experience had not been sufficient to enable him to express any decided opinion, but he was convinced that in certain cases it was the safest method. The English were still employing chloroform, and were making efforts to use it in weaker saturations. With Harcourt's apparatus the percentage of chloroform air was rarely more than 2%. In most of these apparatus it was a difficult matter to manipulate the instrument, and in order to watch the appliance, the patient was frequently forgotten. He had had considerable experience with anesthol, and had found it of value in certain cases, consciousness being more promptly restored and there being apparently less nausea following its administration. Bennett's apparatus is formidable in appearance and for patients of a nervous temperament the psychic effect was a factor to be considered. He thought gas was not free from danger, as the occasional accidents occurring in the dental profession went to testify.

DR. MARTIN had used the Bennett method in five cases, the first one with happy results, the second with disagreeable happenings, and in the last three the results were all that could be desired, there being no nausea, and he was convinced that the method had its advantages in certain cases. Much, he believed, depended upon the method of administration.

DR. EUSTIS wished to mention a point that he thought of value in the administration of anesthesia, and that was the use of suggestion. While an interne at the Charity Hospital, he had made observations upon some 30 cases, and he had found that by being gentle, and with assurances and words of encouragement to the patients, suggesting to them that they would soon be asleep, that

they had passed the period of excitement with practically no unpleasant symptoms. He thought that the condition of the mind of the patient when taking anesthetic played an important role as to the manner in which they took it.

DR. SEXTON had no experience in mixed anesthesia. He had been called in the country in a case in which it was necessary to remove a sequestrum from tibia. He had no assistance, so he gave morphia hypodermatically, started the ether, then gave it to the child's father to continue, when he completed the operation. He thought that ether was the less dangerous, and in many cases could be given by a novice. Morphia would help to do away with excitement produced by ether. He thought the many objections brought against ether, such as its dangers of exploding or bursting a blood vessel, was a bugbear. He thought that the reason that chloroform was not used more in the Northern clinics, was that their operating rooms were more tightly closed in winter, and that the air became heavily charged with the vapors, contained less oxygen, and that in the Southern section, where the rooms had more fresh air, the dangers were less.

DR. LAZARD wished to know how alcoholics behaved with the Bennett method.

DR. MARTIN brought out the importance of the conditions of the mind as to the manner in which patients took an anesthetic. He thought with the negro the fact of their being good surgical subjects did not depend so much upon any hypnotic influences that might be brought to bear, but more to their ignorance of cause and effect. In the educated class of people they were thoroughly cognizant of the danger of an anesthetic, and in losing consciousness did so with dread and fear.

DR. GRANGER mentioned a case in which ether and chloroform and the Bennett method was used without success, when anesthol gave very good results.

DR. MAES, in closing the discussion, said that the Bennett method was especially disagreeable in fat subjects. He thought much of the unpleasantness of the method was due to the overcrowding of the nitrous oxide, and he believed with Peterson, that a valuable point in its administration was in the gradual transition of the gas to the ether. There was a new apparatus on the market which would probably be better than Bennett's.

The post-operative nausea was much less in many of his cases in this method, and he attributed it to the small amount of ether given. The exciting stage was certainly less in the Bennett method than in the other. It was necessary to instruct the patient in regard to the appearance of the apparatus, so as to avoid any mental effects. This was especially so in young subjects. In alcoholic subjects the Bennett method had proved in his hands to be of decided advantage over all others.

### RELATION OF CASES.

DR. KOHNKE called the attention of the Society to a mild type of smallpox existing in the lower section of the City. He did so because the symptoms being so mild, were apt to be mistaken for those of chickenpox.

DR. GESSNER wished to know where he could get the old-time vaccination points. He understood that the New England point was no longer in existence, and with the new points that he had been using recently he had frequent failures.

DR. MAGRUDER said that he had had the same experience as Dr. Gessner, having about 75% failures since he could no longer secure the old New England points. He does not consider any of the vaccine as now prepared reliable, and thinks it high time that a better method of preparation be resorted to.

DR. KOHNKE stated that the old New England point was the most successful, giving in their hands over 90% of takes. Since the New England points could no longer be obtained, the Board of Health tried nearly all the varieties in the market, and was at present using the Mulford's glycerinated points, which though not as successful as the New England, were giving fairly good results. He thought that the glycerine destroyed the efficiency of the virus in time, and they should not be kept too long. He called the attention of the members to the importance of wiping the scratched surface with the side of the point, as the virus was not on the sharp end, but on the flat sides.



## Communication.

---

### Static Machines and Humidity.

#### *Editors of the Journal:*

With the advent of our long summer, with its warm and rainy days, and its hot and sultry days, the trials and annoyances of all owners of static machines will soon begin. For, in spite of the claims of certain manufacturers, there is no static machine made which does not suffer from the inroads of its two worst enemies, humidity and dirt.

I have experimented with the three agents most generally used and recommended to dry out, and keep dry the interior of static machines, viz.: crushed ice and salt, calcium chloride and calcium oxide (ordinary unslaked lime). Briefly stated the result of my observations is as follows: 1st. The crushed ice and salt mixture (freezing mixture) is the most rapid in action, drying the inside of the case within one hour. The principal objection to its use, is that in a few hours the mixture has melted, when it tends to aggravate the original trouble, making it imperative to renew the mixture daily.

2d. Next in rapidity of absorption is calcium chloride, especially if freshly baked, when, under the worst condition of humidity, the machine will charge almost instantly if put to action three hours after introducing the calcium chloride within the case. The objection to its use is that it does not absorb the nitrous oxide and ozone, and these corrode the metal parts within the case.

3d. The calcium oxide (unslaked lime), is slowest in action (about 18 to 24 hours), but absorbs besides the moisture, the gases, thus preventing the corrosion referred to above. The objection to its use is that when it becomes slaked, it becomes pulverized, and the fine, impalpable powder is blown by the revolutions of the plates, all over the interior of the machine. To overcome this I had a box made measuring 18x6x9 to fit inside the case of my machine. It has no top, and the two long sides are made of slats one inch wide, with one inch interval between the slats. After placing the lumps, and always taking care to get large lumps, in

this box I cover the top and sides with two thicknesses of good lawn. For the past year my own practice has been as follows: On entering my office in the morning my first act is to charge my machine; if it will not charge and I have to use it that day I immediately fill two hollow dishes with the freezing mixture and introduce them inside the case, which I tightly close. In from one-half to one hour, depending upon the atmospheric condition, the machine will charge. Experience has taught me that the machine should be started without removing the dishes, even though the solution be nearly melted. This will not splash, and if the case is opened even for the brief period necessary to remove the bowls, the damp air will rush in and undo your work, and the machine will not charge. After my last patient has left I open the case, remove the dishes, wipe carefully with a soft cloth the whole interior of the machine, plates, etc. When this has been done I place in the case the box already mentioned, filled with fresh lumps, and close the case tightly. The next morning the machine charges at once. Notes kept during the year show that the above treatment of my machine was not made oftener than once in sixty days, and the longest interval was 118 days.

Yours truly,

AMEDEE GRANGER.

# N. O. Medical and Surgical Journal

---

## Editorial Department.

---

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

---

---

### Atlantic City Meeting of the American Medical Association.

The fifty-fifth annual meeting of the A. M. A. has gone into history. We feel especially interested in commenting on this event because of our part in consummating the fifty-fourth annual meeting, held in New Orleans in May of 1903. The Atlantic City meeting was a success. It was a success because it stood for a trial of the new methods of organization of the Association, and never in the history of the American medical profession were so many representative men gathered together. The sections were well attended, some of them crowded. The general sessions were so well attended that the second night there was barely standing room for the interested audience. The addresses were of high class, and the direction of the symposiums to governmental medical services in their relation to the profession at large provoked not only excellent provender for reflection, but created startling revelations in the need for medical effort in the correction of evils. Especially true was this at the third night's session, when both Dr. Salmon, of the Department of Animal Industry, and Dr. Wiley, of the Department of Chemistry, called attention to flagrant impositions, almost criminal, upon the public health in the commercial foods, drinks and patent medicine industry. Enthusiasm was aroused at Dr. Wiley's plea for medical interest in seeing to it that in December the Pure Food Bill before the National Congress should pass.

Atlantic City afforded its own attractions, but the local committee had arranged that everything should be free. Besides, smokers were given, yachting parties to the ladies, and on Wednesday night

Dr. Musser entertained a large number of the Association at a banquet at the Marlborough Hotel. Thursday Mrs. Musser received the ladies, and Thursday night a huge reception on the Steel Pier was tendered the whole Association by the President, Dr. Musser.

The commentary universally obtained that every section was successful in the quality and number of papers presented, and the work of the year's organization was evidenced in a registration at the meeting of some 2,700.

Considerable criticism arose regarding the House of Delegates—but the newness of the *modus operandi* and the large number of newer delegates might explain the irregularity of procedure and the lack of parliamentary rule.

The meeting adjourned on Friday, June 10, with the selection of Portland, Oregon, as the next meeting place, under the direction of Dr. R. S. McMurtry, of Louisville, as the presiding officer.

After the adjournment of the meeting quite a number of the members went to the dedication of the University of Pennsylvania laboratories, and on Saturday quite a few attended the Rush monument unveiling at the Naval School grounds in Washington. Dr. J. C. Wilson, of Philadelphia, delivered the address on the occasion in which Dr. Benjamin Rush was handsomely exalted and presented as the first American physician. In accepting the monument in the name of the nation, President Roosevelt delivered a concise and spirited address, recognized the import of the medical profession in a nation's progress. He incidentally dwelt upon the duty of the physician to his citizenship, and so strongly argued for his rights and obligations that the echo of this address must spread far enough into the councils of medical men as to make them hopeful for that representation we have hungered and have labored for in the Cabinets.

Altogether the fifty-fifth annual meeting of the A. M. A. has its lesson of achievement. It must point to a greater solidification of the profession, and with the Northwest ready and prepared next year to fall in line the A. M. A. can feel its potency of no mean calibre and of certain high purpose.

---

### **The Fourth of July and Tetanus.**

Quite a campaign is being waged in the North against the use of dangerous fire-arms during the celebration of our national inde-



pendence and in favor of means for the prevention of tetanus which is so apt to follow after injuries produced, especially by toy pistols.

While in this section of the country the use of firearms is not as common at this time of the year, that is counterbalanced by the fact that tetanus is very apt to prevail in proportion to the height of temperature, so that the great heat, though it diminishes the youthful enthusiasm which displays itself by making noise with toy pistols and cannon firecrackers, renders the danger greater when injuries through such means have been received.

Hence, it would not be amiss for us to call the attention of our medical brethren to the dangers of the season, and remind them of what seems to be the consensus of opinion as to the methods to pursue. There is no question but that the open method is preferable in the treatment of the wounds to which we refer, and that too much attention cannot be given to a proper cleansing of such wounds, both mechanically and by the means of antiseptics, particularly peroxide of hydrogen and carbolic acid; the former on account of its penetrating qualities, and the latter on account of its marked effect upon the tetanus bacillus.

Inasmuch as it seems generally accepted that tetanus antitoxin or antitetanic serum has largely reduced the expected mortality after wounds favorable for the development of tetanus, it would seem eminently wise not to neglect the use of this valuable agent as a prophylactic. It should be used promptly and early, and in full doses, as it does not seem to have met with much success as a curative agent. All the evidence points to its being of great value as a preventive, but of comparatively little as a curative. Hence, there must be no delay, and all those practicing in localities where children are apt to inflict upon themselves or others wounds with blank cartridges or firecrackers should be prepared to make these preventive injections. The dose varies according to the quality or strength of the agent used, from 10 to 20 c.c.

---

### **Monument to Walter Reed.**

Dr. Walter Reed was born in Virginia in 1851, and began the study of medicine at the University of Virginia when only 17 years old, receiving his degree of M. D. in 1868. Later, he also received a degree from the Bellevue Medical College of New York.

He entered the U. S. Army as Assistant Surgeon in 1875. After serving in various posts and making a good record, studying at the same time for over a year in the laboratories of the Johns Hopkins University under the distinguished Prof. Wm. H. Welch, he was promoted to the Surgeonship, with the rank of Major, in 1893. He was detailed in Washington as Curator of the Army Medical Museum and Professor of Bacteriology at the Army Medical School. In 1900 he was sent to Cuba to study the infectious diseases of the country, especially yellow fever. It was at this time that he and his associates made the well known experiments relating to the infectiousness and communicability of yellow fever which culminated in the following principal conclusions:

1st. The specific agent in the causation of yellow fever exists in the blood of a patient for the first three days of the attack, after which it ceases.

2d. A mosquito, the *stegomyia fasciata*, ingesting this blood during the infective period could not convey the disease before about 12 days, but could do so afterwards, probably during the remainder of its life.

3d. The disease cannot in nature apparently spread except by the bite of infected *stegomyia*. Articles used, and even soiled, by patients do not carry infection.

Major Reed died on November 23, 1902, from appendicitis.

The researches of Dr. Reed are among the most valuable contributions to sanitation and hygiene which have ever been made in this country. They called forth the following resolutions from the American Medical Association in 1902:

"The members of the American Medical Association believe that the recent work of the U. S. Army Surgeon in Cuba in relation to the discovery of the method of transmission of yellow fever is of such magnitude and far-reaching beneficence as to rank only second with Jenner's discovery of vaccination."

It is eminently fit that a suitable memorial be erected to Dr. Reed. The entire people of this country, and particularly of the South, are largely indebted to him for his researches and for their present and future results. The medical profession should do its share towards the perpetuation of the memory of one of its illustrious members.

The Walter Reed Memorial Association has been incorporated in

Washington in order to give unity to the various proposals which have been made for the securing of a memorial fund, and is now organized for the collection and care of such sums as they may receive. Contributions from individuals, medical societies, boards of trade and other organizations are solicited. They may be sent direct to the Treasurer, Mr. Chas. J. Bell, of the American Security & Trust Co., Washington, or to this JOURNAL, which will take pleasure in heading the list with its subscription and forwarding all others, which will be duly acknowledged.

---

---

## Abstracts, Extracts and Miscellany.

---

### Department of Obstetrics and Gynecology.

---

In charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER, New Orleans.

---

USES OF SUPRARENAL GLAND IN GYNECOLOGY.—*The Year Book of Gynecology*, edited by E. D. Dudley, contains an interesting extract of a paper by H. Cramer (*Deutsche Medicinische Wochenschrift*) on this subject. This author applied cotton soaked in adrenalin solution to an inoperable carcinoma of the cervix and found that in a few minutes he could cauterize the growth without having hemorrhage ensue, whereas previously there had always been a considerable loss of blood. In a second case, where the ulcerated crater was very large, he injected about 3 c.c. of a 1 to 1000 sol. into the periphery and the bottom of the crater. With this preparation he was able to make ideal curettement of the ulcer. The use of suprarenal extracts in the removal of urethral caruncle, especially those which are situated far in, is obvious. Cramer found that he was able to take away such tumors bloodlessly, and was able to accurately sew up the wound, which was impossible otherwise. A case of unbearable pruritus in the introitus vaginae presented itself, which for a number of weeks had been treated by all the usual methods. There was an intense reddening of the mucous membranes, more like telangiectasis than a simple hyperemia.

A tampon soaked in 1:3000 adrenalin solution gave relief in five minutes. The tampon was allowed to stay in position 24 hours, the application being afterwards repeated four times, with the result that the reddening and pruritus entirely disappeared. The most general and effective use for adrenalin is found in uterine and cervical catarrh. It is easy to observe how quickly ectropion of the cervix is made to grow pale by application of this medicament, and it follows that the endometrium will be similarly affected. The most brilliant use of adrenalin is seen after curettage of the uterus. After application of a 1 to 1000 sol. on a sound wrapped with cotton, bleeding entirely stops in 1 to 2 minutes, then through the dilated cervix, the cavity of the uterus can, with a good light, be seen as far as the fundus. The effectiveness of the application of any medicament after curettement is made greater because of the absence of blood in the uterine cavity.

Limitations of the use of adrenalin are readily found. Although he has had no experience in treating menorrhagia and metrorrhagia with it, Cramer suggests that theoretically it would hardly succeed, since after the period of anemia caused by adrenalin, there is likely to follow a period of hyperemia which gives appropriate conditions for renewed loss of blood. However, according to the experience of Lehmann upon animals, this renewed bleeding need not occur.

THE SIGNIFICANCE OF URINARY ANALYSIS IN PREGNANCY, WITH SPECIAL REFERENCE TO ECLAMPSIA.—Robert N. Wilson, *Amer. Jour. of Obstet.*, Feb., '04. The author discusses the following questions: What are the customary findings during a (clinically) normal pregnancy? In answer to this it may be stated as a general working rule, that the urinary picture, which is normal for the ordinary conditions of life is also indicative of normal conditions in pregnancy. There may be variations from the ordinary normal urinary picture which will still admit of a clinically normal labor. In a series of 1,800 analyses made by the writer, a considerable number being in the later stages of pregnancy, only 22 per cent were entirely free from albumen and sugar, whilst in no case in which glucose was noted was albumen absent. In nearly 60 per cent at least a trace of albumen could be detected. Glucose generally appeared in the last month. In the majority of cases the urea elimination was that of the normal woman under ordinary circumstances, its excretion varying in relation to exercise and diet.



2. What variations from the normal may be noted, and what is their significance?

Most cases of pregnancy present minute traces of serum albumen in the urine, and these can be detected if sufficient care be devoted to the search, probably due to pressure by the gravid uterus. Normal urine always contains a few hyaline casts, but the presence of casts of the granular, blood, and epithelial variety, is a matter of the highest importance. Glucose and lactose may often appear in small quantities, and when confined to such, have no practical significance. A large amount of urea is an important indication of the work of the kidneys, a decided fall in the amount excreted being a reliable indication of oncoming eclampsia.

3. What dependence can be placed on urinary analysis as a warning against impending eclampsia?

The most reliable indications of impaired renal function and of probable eclampsia have been shown by general experience to be the presence of decided quantities of serum albumen, the diminution of the eliminated urea, and the presence of a microscopic renal sediment. Even if the urine appears perfectly normal, the possibility of eclampsia must be considered especially in young women.

---

## Department of General Surgery.

---

In charge of DR. F. W. PARHAM, assisted by DR. F. LARUE, New Orleans.

---

RENAL DECAPSULATION.—I. From the Pathologist's Standpoint. J. M. Van Cott, in the *Medical News* of May 21, writes an admirable argument against the operation proposed by Edebohls. The operation of renal decapsulation involves three fundamental propositions: 1. The nature of the renal circulation; 2. The modus operandi of the restitutio ad integrum in highly differentiated organs; 3. The etiology and pathology of the disease. To establish the validity of the operation it is necessary to show that stripping of the capsula propria and adhesion of the capsula adiposa are competent to reinforce the cortical circulation and that such reinforcement of the perihilar circulation will arrest degeneration of renal tissue and restore areas already destroyed. It must, further-

more, be shown that causes responsible for the disease will cease to affect the kidneys after the operation has been successfully performed. Subjected to these tests the operation must fall, for in the first place, the peculiarities of the renal circulation, which Van Cott considers at length, make it practically impossible that a sufficient collateral blood supply could be established from the fatty capsules or surrounding structures through the cortex; and in the second place, experiments of Litten, Barth, Marchand and others seem to demonstrate that regeneration of tissue in a highly differentiated organ like the kidney could not be expected beyond a certain point. Therefore, a careful consideration of all the arguments advanced in the paper would seem to justify the following conclusions which Van Cott draws: (1) On teleological grounds the renal circulation cannot be restored by decapsulation and substitution of the fatty capsule; (2) No amount of restoration of the renal circulation would restore the integrity of the cortex; (3) Chronic nephritis being a local expression of a general disease will yield only to such treatment as is calculated to cure the general disease; and here there will be only hope of arresting the progress of the renal degeneration. The diseased portions of the organ will never regenerate.

II. From the Standpoint of the Clinician and Surgeon.—To understand the matter fairly let us turn to the work of Edebohls and learn what he actually claims and his proofs. Edebohls says (*N. Y. Medical Journal*, May 28, 1904): "I now consider myself derelict to duty imposed by knowledge gained from experience if at the present stage of the question, and with three conditions fulfilled, I fail to advise renal decapsulation for every sufferer from chronic Bright's disease who consults me and who has a reasonable expectation of not less than a month of life without operation.

"The three conditions are: (1) the clear and unequivocal establishment of the diagnosis of chronic Bright's disease; (2) the absence in the given cases before us of absolute contraindications to *any* operation; (3) the possibility of securing the services of a surgeon reasonably familiar, from practical experience, with the surgery of the kidney."

Further on in the same article he writes: "As a result of my experience and observations to date, embracing 72 cases operated on between six months and eleven and a half years ago, no less

than 69 of which, by dint of unremitting watchfulness and exertion, I have been able to follow either to the termination of their lives or to the present writing, I am happy to be able to state that my expectation and hopes of years ago have been in large measure realized, and that the promise of a yet fuller realization appears bright."

The issue, then, would appear to be fairly joined between the theoretic conclusions based on pathologic grounds and those based on actual results of operative intervention. The pathologist on the one hand maintains that such results are impossible of realization and that laboratory experiments show that no permanent good can be accomplished; the distinguished propagandist of the new surgery, however, after a rich experience maintains that some bona fide cures and many distinct ameliorations demonstrate the truth of his contention that Bright's disease can be cured.

He not only maintains that some forms of nephritis can be cured, but that *all forms whatsoever* may be cured provided the nephritic sufferer have a reasonable expectation of one month of life. The work of Larkin, referred to by Edebohls, is important in this discussion, as furnishing pathologic proof of the correctness of his assertion of cure. The only careful and complete examination of two kidneys of the same subject appears to have been made by him in one of Edebohl's cases four months after decapsulation. A very minute and painstaking examination of a large number of serial sections of both kidneys and the surrounding structures were made by Larkin. As a result he was able to establish clearly the existence of an abundant vascularization of the new capsule along connective tissue paths into the substance of the kidney, "thus affording," says Edebohls, "in the only two human kidneys thus far carefully studied some time after decapsulation, as clear corroboration as could be desired of the probable correctness of the writer's working theory of the formation of a new and increased blood supply to the kidney after decapsulation." Edebohls further contends that experiments on animals are defective in that it seems extremely difficult, if not impossible, to produce *chronic* nephritis in them, hence the effect of renal decapsulation on chronic nephritis in animals, the very thing we should like to know, has not been studied.

It would appear, then, notwithstanding the formidable showing

made by Van Cott from the side of the pathologist, that the last word has not yet been uttered, but the status of the controversy admonishes the cautious practitioner to be wary of presenting the matter in too roseate hue to the unfortunate sufferer from chronic Bright's disease. That *some* forms of nephritis may be materially benefitted seems to have been demonstrated, but to say that *all* forms, even those with a continuing pathologic cause lying behind the mere process in the kidneys, can be permanently cured is only reckless assertion without the probability of any future substantiation. Let us then not deceive ourselves, but, duly regarding the words of the pathologist, continue our clinical observations and experiments tempered with conservatism in our statements.

---

## Department of General Medicine.

---

In charge of DR. E. M. DUPAQUIER, New Orleans.

---

NOTES ON TYPHOID FEVER. (*Continued from May, 1904.*)—Hawkins says that the treatment rests broadly on a clear appreciation of the various ways, such as peritonitis, hemorrhage and toxemia, by which death can come. It is as much preventive as curative. Danger to life comes quickly on the scene in any case, and something can be done to avert it. There is no specific remedy. Treatment consists mainly in attention to detail. Food, cleanliness, protection of skin, attention to the mouth, enemata, bathing, recording of temperature, pulse and sleep, quiet and well ventilated room, at 60° F., instructions to visitors against transferring infective material, disinfection of stools and urine afford ample work for two skilled nurses.

Milk is the appropriate food, a minimum of 50 and a maximum of 70 ounces per diem. Few patients can dispose of the curd of a larger amount. Must be diluted, one part in four of barley water; to be given at regular intervals, every two hours, six to ten ounces, leaving four to six hours for undisturbed sleep. In case of invincible dislike for milk, after using all methods suggested by tact, replace it by whey flavored with coffee or lemon, albumen water (whites of two eggs in a pint of water with an ounce of brandy and a little salt), egg-flip. Alcohol should be used as a medicine and



is not always necessary. When heart is failing, and when toxemia is severe, marked by stupor, delirium and twitching, eight or ten ounces may be given in a day.

Against vomiting, stop milk. Replace it by whey. If continued, stop all food by mouth. Be sure that it is due to gastric catarrh and not to peritonitis. Against constipation a simple enema should be given every third day, and no purgative is admissible from first to last.

Against diarrhea, after feeding, Dover's powder with 25 grains of bismuth subnitrate by mouth. In urgent cases, morphine by needle. Against meteorism, pass long tube up the rectum, inject, with enema, turpentine, use turpentine stupes to abdomen. Use carbolic acid.

Against pyrexia, cold water, sponge, pack and bath.

Against hemorrhage, absolute bodily rest, bed-pan should not be used, buttocks should be packed round with carbolized tow, into which all evacuations should be passed. Use opium in some form. Morphine by needle. Murchison's mixture. Best to withhold stimulant after severe hemorrhage, saline infusion is considered safest. Perforation occurring, laparotomy should be performed with as little delay as possible.

For failing heart and respiration use strychnine, alcohol, ammonium carb., oxygen, leeches (eight or ten) to chest, dry cupping, free use of mustard and linseed. Patient should not be allowed out of bed until at least a fortnight of normal temperature has elapsed. The odd bouts of fever that may occur on no obvious provocation, or on such slight provocation as a change of diet, an unusually copious action of the bowels, or some unwonted emotion, need no treatment. The continuance of slight pyrexia for long after all signs of the specific fever have disappeared, should be met by a full diet and tonics. Look for sequelæ carefully.

---

## Department of Therapeutics.

---

In charge of DR. J. A. STORCK, New Orleans.

---

THE SUPPRESSION OF SALT in the treatment of hyperchlorhydric dyspepsia has been tried recently by Dr. Vincent, of Paris, and

with good results. In one case during a first period the patient was given 12 grammes over and above the usual amount. An analysis of the gastric juice showed there was a notable increase in the amounts of chlorides secreted, and this especially to hydrochloric acid. The hyperchloride regimen was then established to such a degree that the amount of chloride of sodium secreted by the kidneys was only 40 centigrammes. The various morbid symptoms disappeared, and an analysis of the gastric juice showed a remarkable decrease in the amount of chlorides and hydrochloric acid secreted. This would seem to indicate that this regimen is of benefit in certain hyperpeptic forms of dyspepsia.—R. H. TURNER, (Paris Letter) *The Therapeutic Gazette*.

HYOSCINE HYDROBROMATE AS A PRELIMINARY TO ETHER ANESTHESIA.—Robertson (quoted in the *Journal of the American Medical Association*, Jan. 23, 1904) has employed hyoscine hydrobromate in connection with ether anesthesia in fifty-seven cases of abdominal and other operations in adult women, with excellent results. He usually gives .01 of hyoscine hydrobromate hypodermically, half an hour before the beginning of ether inhalation, causing dryness of the mouth, thirst, and dilatation of the pupils, at which time ether is administered. The administration causes but little secretion of mucus. The patients are less anxious, there is a tendency to sleep after the anesthesia, which as a rule is more rapid than when the ether alone is given, and in no case was there severe or prolonged after-vomiting. In fifty-five cases the patients were absolutely quiet during administration. In none of the cases were there any respiratory disturbances following ether.

The hyoscine hydrobromate acts by counteracting the overstimulating effects of ether, decreasing the amount of mucus. If it proves to be free from danger, it will be a valuable aid in the administration of ether.—*The Therapeutic Gazette*.

LUPUS TREATED BY LOCAL APPLICATIONS OF TURPENTINE.—During the past year Hoy (*Cincinnati Lancet-Clinic*, Dec., 12, 1903) has treated several cases of lupus with local applications of turpentine. Picric acid gauze or cotton was employed to keep the ulcer moistened with the turpentine. The lesions healed rapidly and satisfactorily in every case, and have not recurred.—*The Therapeutic Gazette*.

ERGOT FOR SHOCK.—Grad reports experience with ergot given hypodermically during anesthesia, to combat the nausea and vomiting following, etc. While not wanting to appear too enthusiastic about ergot in nausea and shock, he thinks its use merits attention, and while it may not be prompt in all cases, and under all conditions, yet in a very large number of cases it will be of great value in combating the nausea and shock.—*Jour. A.M.A.*, June 11. 1904.

---

## Department of Ophthalmology.

---

In charge of DRS. BRUNS AND ROBIN, New Orleans.

---

TREATMENT OF SYMPATHETIC OPHTHALMIA BY INJECTIONS UNDER THE CONJUNCTIVA OF THE EYE ENUCLEATED.—Drs. Daniel M. Velez and Enrique Grane, Mexico. Following a consideration of the subject at some length, two cases are described, in one of which the manifestations were confined to impaired vision, with some pain and lachrymation, the opposite eye having been removed some years before. After a month's treatment by iodides and mercurials internally and pilocarpine locally, a single injection of gr. 1 of mercuric cyanide, 1-1000, containing an equal proportion of acon resulted in prompt restoration of vision and subsidence of irritability. The injection was only moderately painful, but caused a transitory edema of the corresponding half of the face. A recurrence of symptoms in three months was followed by similar behavior, except that several injections were necessary to control the process. Again in three months a recurrence of symptoms required a repetition of the injections, since when there have been no exacerbations in a period of more than a year, during which time constitutional treatment had been carried out.

In the second case the right eye was phthisical, and for several years the left had suffered from monthly attacks of irido-choroiditis with hypopyon. Vigorous constitutional treatment had been employed without influencing the condition. The right eye was enucleated, and eleven days later hyphema developed in the left, which subsided completely in 24 hours after an injection into the stump of the right. A month later a very slight hypopyon occur-

red, also subsiding within 24 hours after injection was practiced. These phenomena were duplicated within a few weeks, once after the use of atropia, and again controlled by injections, since when there have been no recurrence. —*Journal of Eye, Ear, Nose and Throat Diseases*.

SYMPATHETIC OPHTHALMITIS.—In the *Inter-Colonial Journal of Australia*, Barrett reviews the figures of various authorities and concludes that, so far as the evidence goes, the risk of sympathetic ophthalmitis occurring in a case of severe injury with iridocyclitis is certainly not less than 5%, and probably considerably more. —*Journal American Medical Association*.

SURGICAL TREATMENT OF PERIPHERAL OPTIC NEURITIS.—In the *Journal of Tropical Medicine* Koenig attributes peripheral optic neuritis to some preceding infection, such as la grippe, typhoid fever, gonorrhea, etc. This form is characterized by the absence of vascular stasis and brain disturbances, by the limitation of the edematous infiltration to the optic papilla and its unilateral development. It is the result of circulatory disturbances limited to the papilla and bulbar end of the optic nerve. As it is impossible to act directly on the posterior pole of the eye, he applies treatment to the anterior pole—knowing the close relationship between the two—and treats the condition by sclerotomy. His experience has been limited, but satisfactory with this procedure.

LIGATION OF THE LACHRYMAL CANAL IN CATARACT OPERATIONS.—Quackenboss has operated on two cataract cases, following the suggestion of Baller of Montreal to temporarily ligate the canaliculi to prevent wound infection in operations on the eye. He has also seen two other cases thus operated on. The canal was tied, and in each he succeeded in preventing infection. He sees no use in leaving stitches after the corneal wound has healed firmly. They caused no irritation in the case reported, and were removed at the end of two weeks. Before taking them out, pressure on the sac failed to discharge anything into the eye, but after removal a probe was easily passed, and pressure on the sac caused a small amount of purulent matter to come through the puncta.

NOTE:—(In reference to the suggestion of ligating the canaliculi in cases of cataract complicated with disease of the lachrymal canal, we wish to call the reader's attention to the fact that the idea



was put into practice by other operators long before Dr. Buller published his cases. We witnessed the successful use made of this procedure by Dr. Ernest Fuchs, of Vienna, in 1895. He had been practicing the method for several years, and so far as we know laid no claim to be its originator. We have, since 1896, performed several cataract operations, according to this method, with uniform success.)

BRUNS & ROBIN.

---

## Louisiana State Medical Society Notes.

---

In charge of DR. ISAAC IVAN LEMANN, Secretary, 163 University Place.

---

NEXT MEETING, NEW ORLEANS, MAY, 9 10, 11, 1905.

OFFICERS—President, Dr. Charles Chassaignac, New Orleans; 1st Vice President, Dr. Oscar Dowling, Shreveport; 2nd Vice President, Dr. L. O. Tarleton, Marksville; 3rd Vice President, Dr. J. F. Buquoi, Colomb; Secretary, Dr. Isaac I. Lemann, New Orleans; Treasurer, Dr. M. H. McGuire, New Orleans.

COUNCILLORS—Drs. A. G. Friedrichs, Chairman, 2nd Cong. Dist., 641 St. Charles St., New Orleans; J. J. Ayo, Sec'y., 3rd Cong. Dist., Bowie; P. E. Archinard, 1st Cong. Dist., New Orleans; S. L. Williams, 5th Cong. Dist., Oak Ridge; N. K. Vance, 4th Cong. Dist., Shreveport; C. M. Sitman, 6th Cong. Dist., Greensburg; C. A. Gardiner, 7th Cong. Dist., Sunset.

---

### MINUTES OF TWENTY-FIFTH ANNUAL SESSION.

Held at New Orleans, May 10, 11 and 12, 1904.

#### FIRST DAY.

Tuesday, May 10, Morning Session.

The Twenty-fifth Annual Session of the Louisiana State Medical Society was called to order by the President, Dr. J. M. Barrier, at Tulane Medical College, Canal Street, at 10:06 a. m.

In the absence of Rev. Father Henry Maring, Rev. Father Lawton delivered the invocation.

The society was welcomed by Hon. Paul Capdevielle, Mayor of New Orleans, in a graceful address.

The President extended the thanks of the Society to the Mayor.

DR. L. G. LEBEUF, Chairman of the Committee on Arrangement, reported as follows:

#### REPORT OF COMMITTEE ON ARRANGEMENT.

The report of this Committee always appeared to me as rather superfluous. If I have done my work properly you will certainly

be made aware of that fact before the end of the meeting; if I have not succeeded, no diatribes of mine will convince you to the contrary. Still, allow me to say that with the valuable assistance of your most efficient Secretary, Dr. Wm. M. Perkins, I have endeavored to prevent the Society from being affected by the late hour of the change of meeting place. I attempted to keep the meeting in the minds of the members by a number of circulars and postal cards. Another important part of my work is one which I hope, in a very few years, will place the expenses of the entertainment of all annual meetings within the reach of the means of any fair-sized town of the State. I mean the custom inaugurated last year of charging for exhibit space and securing a small revenue from the advertisements in the program.

This work has been most ably performed this year in a business-like and systematic manner for us by Dr. I. I. Lemann, and I am glad to be able to say that our gross receipts of revenue from this source will net us over \$400, which will go to the legitimate expenses of the meeting. Remember that my desk will always have someone ready to help any member with any information that we can give him, or render any assistance in our power about your railroad tickets, boarding, etc. If you do not receive your invitations let us know at once.

Do not forget to register! Do not forget the buffet lunch at the New Orleans Polyclinic to-day, on adjournment! Walk two blocks towards the hospital and then two blocks towards the River.

Dr. Quitman Kohnke, the efficient chairman of our City Board of Health, has kindly volunteered to lend us for a few days before shipping it, his very interesting St. Louis Exposition Exhibit. It is in the Assembly Room, to the right, and I wish to call your special attention to this.

The invitation card to the lunch to-morrow at the Chess, Checkers and Whist Club, corner Canal and Baronne, also extends the privilege of the club rooms to all visiting members during their stay with us, and we hope they will avail themselves of that privilege.

L. G. LEBEUF, Chairman.

On motion the report was accepted.

Roll call was dispensed with.

The reading of the minutes of the 1903 meeting was dispensed with.

The President, DR. J. M. BARRIER, reported as follows:

### ANNUAL REPORT OF PRESIDENT.

Another year has been added to the history of the Louisiana State Medical Society, and we meet on this auspicious occasion, the Twenty-fifth Annual Session, with a proud record in the past of grand achievements, and a future with hopeful and flattering prospects.

At the last meeting of the Society, a new Constitution and By Laws, necessitating a new plan of organization, was adopted, in harmony with the plan proposed by the American Medical Association, and the Society commenced a new life and a new growth. In making the change it was not without considerable apprehension, as under the old Constitution the last few years had been the Society's most prosperous. The results in one year have proven that no mistake was made. I will not go into details. Your able Secretary, in his report, will give you a full account of what has been accomplished. The greatest proof of the new plan of organization, was the enthusiasm which immediately took hold of the profession. The officers had scarcely returned home before applications for suggestions and plans for organizing medical societies had come from several parishes. From the beginning it looked as if the infection came from the profession and spread to the officers, instead of the reverse. It was apparent that the time for medical revival was at hand. The council determined at once to make an aggressive campaign. Literature on medical organization and circular letters began to pour from the Secretary's office. The President, on approval of the Council, determined on making several short itineraries. He visited a number of parishes, organizing societies in each parish visited. The Councilors in the several districts also made official visitations and succeeded in organizing societies in their respective districts. Each member of the Society in his parish joined hands with the organized movement and gave his hearty support and co-operation. The profession, aroused and enthused, said: "Barkis is willin'."

Each officer has been active and willing in the discharge of his duties. The Secretary has been especially active and energetic, and has done so at considerable sacrifice of his own personal interests. It is not saying too much, that more is due him than to

anyone else for this year's success. The *New Orleans Medical and Surgical Journal* and the *Shreveport Medical Recorder* have given invaluable aid, which I hereby acknowledge with sincere thanks.

The aid and support given me by the officers and members of the Society, and the encouragement and co-operation of the entire profession, have made it easy to be president.

For the uniform courtesies extended me in the several parishes visited, I hereby extend my thanks and heartfelt appreciation, and the recollections of these occasions will ever be the sweetest remembrances of my life. The matter that should most concern the Society, in session and out of session, is the complete organization of the profession. While much has already been accomplished, the work has scarcely begun. We still have more than one-half the physicians of the State to bring into the membership of the Society, and quite a number of parishes to be organized. Most of the societies are active and vigorous, but some are feeble, and unless properly nourished and cared for, will die in infancy. The plan of visiting the parishes and parish societies by the president and officers in the interest of medical organization, I believe will be attended by the greatest results. While New Orleans should be the domicile of the Society, and the majority of the sessions should be held here, it is in the interest of the Society to meet every three or five years in other sections of the State. But to do this, the precedent that is growing, making it incumbent on the profession of the place of meeting to bear the entire expense of entertainment, should be abolished. The membership of the Society is growing, and it is the earnest desire that the attendance at the meetings should also increase. To require the profession of the place of meeting to give an expensive banquet and other expensive social entertainments, is unjust to the physicians of that place, and will eventually redound to the detriment of the Society. I do not object to these features of our meetings, but think they should be arranged on other lines. I would suggest that invitations to the Society should be sent to the President at least one month before the Annual Meeting.

I will not burden this report with my own suggestions and recommendations. Several matters demand the Society's consideration, and will be taken up at the proper time.



I thank you for the honor you have conferred on me, and in my feeble and weak efforts I have tried to show my appreciation.

I congratulate the Society upon what has already been accomplished. The past is only an omen of the future, and I believe in a few years no State in the Union will be more completely organized than Louisiana. I am glad to see so many present, and I extend to you a hearty welcome. I trust your labors during this session will be profitable and harmonious, and your stay in the hospitable City of New Orleans will be pleasant and enjoyable. May that Divine Providence which has vouchsafed health, life and prosperity to you during the past twelve months, continue to rest on you and yours.

On motion the report was accepted and ordered spread on the minutes.

The First Vice President, DR. L. G. LEBEUF, made a verbal report.

The Third Vice President, DR. OSCAR DOWLING, also made a verbal report.

The Secretary and the Treasurer were granted further time to make their reports, because data from many parishes had not been furnished to them in time.

DR. A. G. FRIEDRICHS, Chairman of the Council, asked for further time to make his report, for the same reason.

The Treasurer read the list of delinquent members still owing dues for 1902 and 1903, and they were dropped from the roll, provided they were not now members in good standing of any Component Society.

DR. CHASSAIGNAC moved that the Society accept, according to the law, any list tendered by parish medical societies of members in good standing, irrespective of indebtedness to the State Society previous to re-organization at 1903 meeting. Seconded and carried.

DR. PERKINS moved that the Treasurer be authorized to expunge from his books, all dues prior to 1904, which he found it impossible to collect by October 1, 1904. Seconded and carried.

DR. PERKINS moved that all applications for membership from unorganized parishes be referred to the Council. Seconded and carried.

The Committee on Scientific Work submitted as its report the printed program for the 1904 meeting.

The Committee on Public Policy and Legislation, had no report to make.

DR. WM. M. PERKINS, Chairman of the Committee on Publication, made the following report:

#### REPORT OF PUBLICATION COMMITTEE.

*To the Officers and Members of the Louisiana State Medical Society:*

GENTLEMEN:—Your Publication Committee submits herewith a copy of a letter to Drs. Chassaignac & Dyer, which is self-explanatory.

Two papers were returned to readers for review, as they contained too many allusions to drug houses, etc. One was corrected and returned and accepted by the Committee. One member preferred to withdraw his paper.

The unprecedented rush of other matters in the office of the Secretary has delayed publication, but all manuscripts are in the hands of the printer, and has been set up, except the index, we believe. The printer promises delivery during the current month.

Respectfully Submitted,

Wm. M. PERKINS, M. D.,  
*Chairman Publication Committee.*

New Orleans, June 16, 1903.

*Drs. Chassaignac & Dyer, Editors New Orleans Medical and Surgical Journal, City:*

DEAR DOCTORS:—The Publication Committee of the Louisiana State Medical Society, with the concurrence of the President, agrees as follows:

THE NEW ORLEANS MEDICAL AND SURGICAL JOURNAL is to be the official journal of the Louisiana State Medical Society for the year ending June 30, 1904, and the "Louisiana State Medical Society Notes" is to be a department of the Journal, conducted by the Society, and sufficiently large for its needs. The Society will pay one dollar per annum for a year's subscription for each member, and at the same rate for members added or dropped quarterly. The Journal is to publish the 1903 transactions of the Louisiana State Medical Society in book form, 600 copies, for \$1.10 per print page, in accordance with the following specifications:

Binding to be in cloth. Volume to be fully up to the standard of 1902 Transactions. Type matter to measure 4x7 inches per page, and to contain on an average of not less than 450 words per

page, 10, 11 or 12 point type. Paper to be 60 to 70 book paper, or its equivalent. All work to be done satisfactorily and promptly.

Very truly yours,

WM. M. PERKINS, M. D.

*Chairman Publication Committee.*

On motion report was adopted.

DR. CHAS. CHASSAIGNAC, Chairman of the Committee on Pasteur Institute, made the following report:

New Orleans, May 9, 1904.

*To the Officers and Members of the Louisiana State Medical Society:*

GENTLEMEN:—As Chairman of the Committee on Pasteur Institute, appointed at our last Annual Session, I beg to report that I had made all preparations for a campaign in line with the resolutions passed by this Society, when it came to my knowledge that the Charity Hospital was actively considering the establishment of a department for the treatment of patients threatened with rabies. It was deemed best to do nothing until the Hospital decision was reached; and as now the Charity Hospital has instituted this department, which is in active operation, I have deemed it best to do nothing further.

Some of the members of the Committee had already taken active steps to obtain funds, and they were all notified to transfer any interest or promises to the Charity Hospital authorities.

I hope that the Society will approve of the lack of further action under the circumstances.

Respectfully Submitted,

CHARLES CHASSAIGNAC, M. D.

*Chairman.*

On motion report was adopted.

DR. L. G. LEBEUF informed the Society that the expenses of installing the Department at the Charity Hospital had been paid by the Committee on Arrangements of last year's meeting of the American Medical Association, from balance of funds collected last year for entertainment of this Society and the A. M. A.

There were no reports from the Committee on American Congress of Tuberculosis, and the National Auxiliary and Legislative Committee.

On motion Dr. Granger's paper was postponed to the evening session.

DR. L. G. LEBEUF, New Orleans, read a paper entitled "The Attitude of the Profession Towards Race Suicide."

Discussed by Drs. Charles Chassaignac, C. J. Ducoté, T. S. Dabney, and D. L. Watson.

DR. A. C. EUSTIS, New Orleans, read a paper entitled "Rectal Feeding."

Discussed by Drs. F. W. Parham, J. J. Ayo, M. J. Magruder, Dabney, Lemann, and Dr. Eustis, in closing.

DR. A. JACOBY, New Orleans, read a paper entitled "Chloroform Anesthesia."

Discussion postponed to afternoon session.

On motion, adjourned to lunch at the New Orleans Polyclinic.

#### AFTERNOON SESSION.

Meeting was called to order by the President.

Discussion of Dr. Jacoby's paper was taken up and participated in by Drs. C. J. Grémillion, E. D. Friedrichs, A. C. King, J. Lazard and Wm. M. Perkins, and Dr. Jacoby, in closing.

DR. A. G. FRIEDRICHs, Councillor, reported for the Council.

DR. J. F. BUQUOI, Councillor, reported for the First Congressional District as follows:

#### FIRST CONGRESSIONAL DISTRICT.

*To the President and Members of the Louisiana State Medical Society:*

As Councillor of the First Congressional District, and in accordance with Chapter V, Section 2, of the By-Laws, I beg leave to submit the following report:

This District comprises the parishes of Plaquemines, St. Bernard and the 3d, 4th, 5th, 6th, 7th, 8th, and 9th wards of Orleans Parish. The Parish of Plaquemines was among the first to organize a medical society, the date of reorganization, February 3, 1903, even antedating the reorganization of the State Society on the parish basis. Membership 8, 1 honorary. One regular physician in the parish not a member. There is one negro physician in the parish, and one physician has removed.

St. Bernard Parish has within its borders only two qualified physicians, an insufficient number to organize. In view of that



fact an attempt was made to consolidate the two parishes (Plaquemines and St. Bernard), thereby creating a District or Bi-Parish Society. This was found to be impracticable, however, owing to the lack of traveling facilities between the two parishes. It was considered more expedient to urge the two St. Bernard physicians to become members of the Orleans Parish Medical Society, if they so desired, as meetings could then be more easily attended.

The eligible physicians of the wards of Orleans Parish included in the District, who are non-members of their local society, were invited to join by that Society.

Very respectfully

J. F. BUQUOI, M. D.

*Councillor First Congressional District.*

DR. F. R. TOLSON, Councillor, reported for the Third Congressional District as follows:

### THIRD CONGRESSIONAL DISTRICT.

Grand total of practitioners in Third Congressional District since last report 196.

This is divided as follows:

Membership in parish societies.....	51
Eligible to membership.....	81
Not eligible to membership.....	5
Retired .....	4
Died .....	12
Removed .....	13
Registered, but not graduates.....	2
Graduates, but not registered.....	4
Neither graduates nor registered.....	11
Negroes .....	13

---

Total .....196

F. R. TOLSON,

*Councillor Third Congressional District.*

### SIXTH CONGRESSIONAL DISTRICT.

DR. S. L. WILLIAMS reported for DR. C. M. SITMAN, Councillor Sixth Congressional District, as follows:

Ascension Parish Medical Society is chartered, with a membership of 14. Two other doctors in the parish are without diplomas.

East Baton Rouge Parish is chartered, and has a membership of 20. Eleven physicians, of which three are colored, are not members.

West Baton Rouge Parish has a chartered society, with eight members. This includes every physician in the parish.

East and West Feliciana are united, with a chartered membership of nineteen, seventeen in East Feliciana, and two in West Feliciana. There are about five physicians who do not belong to the Society.

In Pointe Coupée there is a chartered membership of fifteen. Four not members, one of whom is a negro.

Iberville Parish Medical Society has a chartered membership of sixteen. There are three non-members and one negro, not registered.

Tangipahoa Parish Medical Society is chartered. This parish gives a registration of sixteen, eight not registered and three not graduates.

Livingston Parish has seven physicians, none of whom are members of any parish society.

All the parishes in this District are organized and in good working order, with the exception of St. Helena, Washington and Livingston, which have too few physicians to organize successfully. A revised registration of these should be made before the Council adjourns.

DR. C. A. GARDINER, Councillor, reported as follows for the Seventh Congressional District:

#### SEVENTH CONGRESSIONAL DISTRICT.

*Mr. President and Gentlemen of the Louisiana State Medical Society:*

I beg leave to make my report of the condition of the profession in the Seventh Congressional District. Of the eight parishes in the District, six have organized Component Societies, viz.: Acadia, with a membership of fifteen, out of twenty-five physicians in the Parish; Avoyelles, with a membership of twenty-three, out of thirty regular physicians; Calcasieu, with a membership of sixteen, out of forty regular physicians; Rapides, with a membership of fourteen, out of thirty regular physicians; St. Landry, with a membership of eighteen, out of forty-five regular physicians; Ver-

non, with a membership of fourteen, out of fifteen regular physicians.

Cameron has not yet organized. Have written to every physician in Cameron (four in all), but have received no encouragement. Grant is on the verge of organizing. Drs. Woodall and Harrison, of Montgomery, have matters in charge, and will organize in the near future.

I have here in detail the parishes, with list of officers and members of each parish society.

Respectfully,

C. A. GARDINER, M. D.

*Councillor Seventh Congressional District.*

(DR. N. K. VANCE's report for the Fourth Congressional District had been sent to the Council.)

On motion the above reports were accepted and referred to the Publication Committee.

DR. GARDINER moved that a vote of thanks be extended the President, DR. BARRIER, and the Secretary, DR. PERKINS, for the assistance rendered the Council and the Society, in their efforts to promote the welfare of the Society. Seconded and carried.

The section on Ophthalmology had collected several papers under the general heading, "Some of the More Common Diseases of the Eye," as follows:

The Chairman, DR. R. F. HARRELL, read a paper entitled, "Dacryocystitis."

DR. F. M. THORNHILL read a paper entitled: "Report of a Unique Case of Destruction of Both Eyes by a Stray Bullet from a Pistol."

DR. O. O. HAMNER read a paper entitled: "Gunshot Wound of the Face, Resulting in Complete Destruction of the Sight of Both Eyes."

Privileges of the floor extended to DR. C. P. WERTENBAKER, U. S. M. H. Service, and DR. JOHN J. REILLY, U. S. A., by the Chair.

DR. M. FEINGOLD read a paper entitled: "Two Cases of Unilateral Sympathetic Irritation of the Eye."

All the above papers were discussed by Drs. Bruns, Salter, and Drs. Feingold, Thornhill and Harrell in closing.

DR. A. C. KING, Chairman of the Section on Obstetrics, read a paper entitled: "The Value of Axis Traction Forceps in Cer-

tain Conditions. Report of Cases."

Discussed by Dr. McGehee and Dr. King in closing.

DR. S. M. D. CLARK, Chairman of Section on Gynecology, read a paper entitled: "Dysmenorrhea."

Discussion postponed until night session. Adjourned.

#### NIGHT SESSION.

Meeting called to order by Third Vice President, Dr. Oscar Dowling.

DR. A. GRANGER, New Orleans, read a paper entitled: "Report and Exhibition of cases of Cancer Treated by Mercuric Cataphoresis."

This was illustrated by lantern slides. Discussed by Drs. Guthrie, Bruns, A. G. Friedrichs, Perkins and Dr. Granger in closing.

(Recesses were held for inspection of cases exhibited by Drs. Granger and Guthrie.)

Discussion on Dr. Clark's paper, postponed from afternoon session, was participated in by Drs. Lemann, Perrilliat, Walet, Joachim, Landauer, Miller and Dr. Clark in closing.

Section on Surgery. The Chairman, DR. H. B. GESSNER, New Orleans, read a paper entitled: "The Importance of Surgical Tuberculosis to the General Practitioner."

DR. J. B. GUTHRIE, New Orleans, read a paper entitled: "X-Ray Therapeutics of Surgical Tuberculosis."

DR. E. J. HUHNER, New Orleans, read a paper entitled: "Surgical Tuberculosis from an Orthopedic Standpoint."

Discussed by Drs. J. F. Oechsner, E. D. Martin, Durel, Eustis, Jacoby, Guthrie and Dr. Huhner in closing.

On motion, adjourned.

---

The President has appointed the following Officers of Sections:

GENERAL MEDICINE.—Chairman, Dr. L. G. LeBeuf, of New Orleans. To open discussion, Dr. Charles Galloway, of Timon; Dr. Nash Collins, of Delhi.

SURGERY.—Chairman, Dr. C. J. Grémillion, of Alexandria. To open discussion, Dr. E. D. Martin, of New Orleans; Dr. E. D. Newell, of St. Joseph.

NEUROLOGY.—Chairman, Dr. L. L. Cazenavette, of New Orleans. To open discussion, Dr. R. M. Van Wart, of New Orleans; Dr. E. M. Hummel, of Jackson.



**MATERIA MEDICA AND THERAPEUTICS.**—Chairman, Dr. P. A. Boykin, of Jeanerette. To open discussion, Dr. R. McG. Carruth, of New Roads; Dr. W. L. Egan, of Shreveport.

**DISEASES OF CHILDREN.**—Chairman, Dr. E. D. Fenner, of New Orleans. To open discussion, Dr. T. S. Kennedy, of New Orleans; Dr. P. J. Dansereau, of Labadieville.

**OBSTETRICS AND GYNECOLOGY.**—Chairman, Dr. L. Perrilliat, of New Orleans. To open discussion, Dr. E. L. Irwin, of Clinton; Dr. A. W. Jones, of Monroe.

**GENITO-URINARY DISEASES.**—Chairman, Dr. C. Menville, of Houma. To open discussion, Dr. P. J. Gelpi, of New Orleans; Dr. G. J. Sabathier, of New Iberia.

**DERMATOLOGY.**—Chairman, Dr. Isadore Dyer, of New Orleans. To open discussion, Dr. R. Hopkins, of New Orleans; Dr. S. H. Scruggs, of Cloutierville.

**OPHTHALMOLOGY.**—Chairman, Dr. O. M. Dowling, of Shreveport. To open discussion, Dr. E. A. Robin, of New Orleans; Dr. F. E. Girard, of Lafayette.

**OTOLOGY.**—Chairman, Dr. J. R. Fridge, of Baton Rouge. To open discussion, Dr. W. Scheppegrell, of New Orleans; Dr. E. O. Powers, of Grangeville.

**MEDICAL JURISPRUDENCE.**—Chairman, Dr. A. L. Metz, of New Orleans. To open discussion, Dr. D. N. Foster, of Franklin; Dr. S. J. Smart, of Logansport.

**SANITARY SCIENCE AND QUARANTINE.**—Chairman, Dr. Q. Kohnke, of New Orleans. To open discussion, Dr. W. G. Owen, of Whitecastle; Dr. J. S. Stephens, of Natchitoches.

**BACTERIOLOGY.**—Chairman, Dr. J. J. Archinard, of New Orleans. To open discussion, Dr. N. K. Vance, of Shreveport; Dr. O. L. Pothier, of New Orleans.

**ANATOMY AND PHYSIOLOGY.**—Chairman, Dr. M. Souchon, of New Orleans. To open discussion, Dr. W. G. Branch, of Bunkie; Dr. C. E. Edgerton, of Coushatta.

**ORAL SURGERY.**—Chairman, Dr. A. G. Friedrichs, of New Orleans. To open discussion, Dr. B. A. Colomb, of Union.

The Secretary, carrying out the instructions of the Society at the recent meeting, has arranged with the Orleans Parish Medical Society for permanent official headquarters. Until the Orleans Parish Medical Society moves into its new building on Elk Place,

the official address of the Society is, therefore, 163 University Place.

The regular quarterly meeting of the St. James Parish Medical Society was held at Lutchet on June 2, 1904, with the following members present: Dr. F. C. Tircuit, President; Dr. L. A. Gaudin, Vice President; Dr. J. F. Buquoi, Secretary and Treasurer; Drs. George H. Jones, P. H. Jones, J. E. Doussan, L. O. Waguespack and J. L. Deslattes. The meeting proved the most interesting and enthusiastic yet held. The subject chosen for general discussion, "Summer Diarrhea of Children," brought forth a lengthy and instructive debate. Dr. Gaston Gaudet, of Pauline, was elected a member. Two applications for membership were received, bringing the total membership to seventeen active members. Subject proposed for general discussion at the next quarterly meeting: "Continued Fevers."

DRS. WM. M. PERKINS, R. MATAS, JOHN SMYTH, F. A. LARUE, U. MAES, of New Orleans, and W. L. GRAHAM, of Campti, were in attendance at the Atlantic City meeting of the American Medical Association.

DR. L. E. H. DUFFEL has removed from Houma to Weeks, La.

Two parish societies, Bossier and Vermillion, have been chartered since last report in May Journal. The roster and organization of these societies are as follows:

BOSSIER PARISH MEDICAL SOCIETY.—Organized March 24, 1904. Chartered April 26, 1904. Charter members, 14, as follows: President, Dr. J. L. Scales, Alden Bridge; Vice President, Dr. D. C. McAnn, Atkins; Secretary-Treasurer, Dr. C. H. Irion, Benton; Drs. H. E. Atkins, Atkins; W. F. Bell, Bolinger; R. H. Blackman, Plain Dealing; W. F. Botts, Shreveport; A. R. Bush, Sligo; W. D. Lassiter, Benton; E. E. Martin, Plain Dealing; J. L. Page, Des Arc; J. M. Sheppard, Elm Grove; B. Wise, Benton; G. A. Wise, Vanceville. Meets second Monday of each month.

VERMILLION PARISH MEDICAL SOCIETY.—Organized October 17, 1903. Chartered May 4, 1904. Charter members, 9, as follows: President, Dr. M. R. Cushman, Abbeville; Vice President, Dr. J. T. Abshire, Leroy; Secretary, Dr. C. J. Edwards, Abbeville; Treasurer, Dr. H. B. White, Gueydan; Drs. E. W. Gill, Gueydan; J. P. Heard, Gueydan; A. C. Schilling, Abbeville; J. A. Villien,

Mauriceville; R. J. Young, Abbeville. Meets second Monday of each month.

The notice of members is called to the new mode of publishing the scientific proceedings. There will be no bound volume for 1904 and the papers will appear in instalments in the official journal. The business minutes will be published in three installments in this Department. Members are urged, therefore, to preserve their journals for binding at the end of the year if they desire a complete record of the Society's proceedings. The advantages it is hoped will accrue from the new plan are wider publicity and reduced cost.

The Secretary is specially desirous of keeping in close touch with the parish organizations, and to that end asks Parish Secretaries to report to him all matters of interest pertaining to their organization or to the individual members thereof.

---

## Orleans Parish Medical Society Notes.

---

[Edited by the Publication Committee, Drs. S. M. D. Clark, Chairman, Jules Lazard and N. F. Thiberge.]

---

The following resolutions have been adopted by the Society:

Be it resolved, That it is the sense of the Orleans Parish Medical Society that it is inconsistent with the highest ideals of the medical profession for members to permit the appearance in the daily press of articles bearing on their personal attainments or achievements.

The second resolution is:

Whereas, The frequent appearance in the daily papers of articles dealing with the professional attainments of members of this Society would seem to indicate a growing disregard for medical ethics;

Be it resolved, That copies of all articles appearing in the daily press of this city relating to members of this Society shall be placed by the Secretary in a scrap book, which shall be kept on the President's desk for the inspection of members. The book shall be indexed, and any member whose name shall appear therein will have the privilege of attaching thereto a written explanation.

Resolved, That a copy of this resolution be sent to each member of this Society.

At our last meeting it was moved, seconded and carried that a committee be appointed to visit the editors of the different papers of this city, bring to their attention the above resolutions and impress upon the management of the papers the desire of the medical profession in reference to articles of a personal character appearing in their paper.

There are still a large number of members of the Society who have failed to subscribe to the Domicile Bonds. The President stated at the last meeting that \$2,000 was still wanted in order to complete the desired amount.

We have now 229 members, which shows a healthy increase, there being 210 members at the close of last year's administration.

In the next 30 days the Committee in charge will take possession of the site recently purchased. It will take about two months to effect the necessary changes before the building will be suitable for occupancy, so if all things prove satisfactory the Society should be quartered in its new domicile on October 1st.

---

---

## Medical News Items.

---

A BRONZE STATUE OF DR. BENJAMIN RUSH was presented by the American Medical Association to the United States Government, June 11.

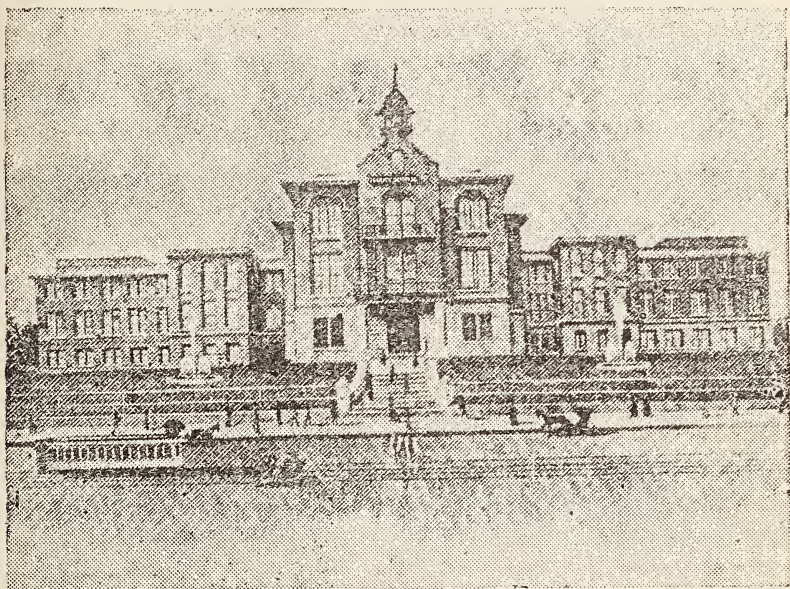
THE ILLINOIS STATE MEDICAL SOCIETY has opened a camp at Ottawa, Ill., for tuberculosis patients. There are accommodations for about 30, and it is expected that the Camp will be self-supporting.

A BILL HAS BEEN PASSED BY CONGRESS regulating the practice of medicine in the Indian Territory. This provides for a medical examining board in each district, composed of three physicians appointed by the district judge.

THE NEW SHREVEPORT CHARITY HOSPITAL is about completed, and we present a cut of the imposing structure. It is about 287



feet in length; it contains six wards, which will be increased to twelve when the two additional wings contemplated are built. The details of the building have been carefully worked out, and on the whole it becomes one of which the State can be proud.



**New Shreveport Hospital.**

THE ADMINISTRATORS OF THE TULANE EDUCATIONAL FUND, it is announced, have just purchased a square of ground adjoining the Richardson Memorial College building, on which it is proposed to erect a hospital for the destitute of all classes and colors, under the provisions of the will of Mr. A. C. Hutchinson, whose residuary legatee the University is, thereby obtaining about \$800,000.00. This amount is willed to the University for the benefit of the medical department as well as to help the sick poor. The site, with the improvements thereon, which consist of the old Crescent City Brewing Co., cost \$125,000. Sufficient of the Hutchinson Fund is to be set aside for the maintenance of this Hospital, and, presumably, a portion of it also will be used to establish additional laboratories, or make other improvements in the medical department.

THE FOLLOWING MEDICAL COLLEGES AND POST-GRADUATE SCHOOLS ARE ADVERTISED in this number of the JOURNAL. Prospec-

tive medical students and physicians who are interested in post-graduate work, are invited to notice them:

Tulane University Medical Department, University of Nashville, Jefferson Medical College, Atlanta College of Physicians and Surgeons, New York Polyclinic Medical School and Hospital, Philadelphia Polyclinic, New Orleans Polyclinic.

THE NEXT PAN AMERICAN CONGRESS will be held in Panama the latter part of December, 1904. This will be the fourth of the series. They take place every three years and have been held so far, in Washington in 1893, in Mexico in 1896; was to have been in Venezuela in 1899, but on account of war in that country it was changed to Cuba, and postponed to 1901 on account of fever previous to that time. It is thought that Panama will be an interesting place for the Convention, and further information will be published from time to time. Dr. Chas A. Reed is President of the International Executive Committee, and Ramon Guiteras is Secretary.

THE FIFTEENTH INTERNATIONAL MEDICAL CONGRESS will take place in Lisbon, Portugal, in 1906, and the King and Queen of Portugal have graciously accepted to be its patrons. The President is Dr. Costa Alemão, and the Secretary is Prof. Miguel Bombarda. We shall shortly publish further information concerning the Congress.

THE TRI-STATE MEDICAL SOCIETY OF IOWA, ILLINOIS AND MISSOURI met in St. Louis, June 15 to 17.

THE INTERNATIONAL CONFEDERATION OF STATE MEDICAL EXAMINING BOARDS held their 14th annual meeting in Atlantic City on June 6, 1904. Dr. F. A. Larue, of this city, was the Secretary-Treasurer for this session.

DURING THE PAST YEAR there were 2413 new members of the A. M. A. This makes a total membership of about 16,000.

At the last meeting of the BOARD OF MEDICAL EXAMINERS, held in Little Rock, Ark., there were 72 applicants, and 19 failed.

Forty-two of the fifty-four applicants passed the BOARD OF DENTAL EXAMINERS at Jackson, Miss., at its last meeting in May.

THE ST. JAMES PARISH MEDICAL SOCIETY had an interesting meeting in June, at Lutchet, La. There was a good attendance.

At a meeting of the AMERICAN MEDICAL EDITORS' ASSOCIATION on June 7, the following officers were elected: Dr. Harold N. Moyer, Chicago, President; Drs. James Evelyn Pilcher, Carlisle, Pa., and Otho F. Ball, St. Louis, Vice Presidents; Dr. Joseph McDonald, Jr., New York City, Secretary.

DR. LEWIS S. MCMURTRY, OF LOUISVILLE, KY., was elected President of the A. M. A. He is a graduate of the Medical Department of the Tulane University of Louisiana.

DR. G. C. MOUTON has been appointed coroner of Acadia parish.

MR. H. K. MULFORD, of Philadelphia, was in New Orleans last month looking after the interests of his firm.

SURGEON H. R. CARTER of the Public Health and Marine Hospital Service, has been ordered to report to the Isthmian Canal Commission for duty on the Isthmus of Panama in connection with quarantine matters there. Dr. Carter is particularly well fitted for this position, as he has had a wide experience as a quarantine officer and will easily grasp the problems and responsibilities of quarantine work on the Isthmus.

DR. R. E. STONE, of Amite, La., is in New York for his vacation.

DR. F. E. DANIELS, the well known editor of "Red Back," was elected President of the Texas Medical Society at Austin.

THE INTERNATIONAL JOURNAL OF SURGERY sent out a large number of pictures of Dr. John H. Musser, retiring President of the A. M. A.

DR. WILLIAM T. CORLETT, of Cleveland, Ohio, was elected President of the American Dermatological Association at its last meeting in June. The next meeting will be held in New York in December, 1905.

DR. V. O. SCHAYOT was appointed health officer of the parish of Plaquemines, at a salary of \$50.00 per year.

DR. ROGERS has removed from Patterson to Napoleonville, where he will practice.



AMONG THOSE WHO ATTENDED THE MEETING of the A. M. A. at Atlantic City were: Drs. R. Matas, J. Smyth, W. M. Perkins, F. A. Larue, I. Dyer, J. M. Barrier, F. J. Mayer and U. Maes.

DR. R. E. McBRIDE has moved from Houma, La., to Las Cruces, New Mexico.

DR. A. G. FRIEDRICH, Dean of the New Orleans College of Dentistry, gave an address before the Mississippi State Dental Association on "Fracture of the Inferior Maxilla."

MISS KATHERINE DENT was elected President of the Nurses' Association at its last meeting, to succeed Miss Quaife who resigned.

DIED.—Dr. S. T. Dunning, of Canton, Miss., died at his home on June 19. The doctor was very old, and was once a subscriber to the Journal.

MARRIED.—Dr. William Thomas Williams and Miss Ida Lelia Stephens, on June 15, at Natchitoches, La.

DR. THEODORE LITTELL, of Morrow, La., and Miss Etta Northrope, of Baton Rouge. The couple left for Morrow where they will reside.

On Tuesday, June 14, Dr. Laurence Richard DeBuys and Miss Miria Duggan. The doctor and his bride left for Houma, La., where they will make their home. Dr. DeBuys goes to fill the place left vacant by Dr. R. E. McBride.

PERSONAL.—Dr. Charles A. Oliver, of Philadelphia, Pa., has been chosen by the British Medical Association as its official guest from the United States for its seventy-second annual meeting, which is to take place in Oxford.

During his stay Dr. Oliver will be the guest of Mr. Robert Walter Doyne, the President of the Ophthalmological Section of the Association, and the Lecturer on Ophthalmology at Oxford University.

IN ANNOUNCING THE FACULTY CHANGES at the Medical Department of Tulane University last month, we omitted to mention that Dr. L. F. Reynaud had been elected Professor emeritus of Materia Medica, etc., and that Dr. J. M. Batchelor had been elected Associate Professor of Clinical Surgery, as these items had not been furnished to us.



WE ARE GLAD TO NOTICE in the list of graduates at the Commencement of the Woman's Medical College of Pennsylvania, which took place on May 18, 1904, the name of Miss Clotilde C. Jauquet, who is the daughter of the esteemed Superintendent of the Eye, Ear, Nose and Throat Hospital of this City. We understand that Miss Jauquet will practice her profession in this city.

DR. WILLIAM A. PAYNE, former bacteriologist of the New York City Board of Health, is in New Orleans investigating dysentery, and the use of a curative serum. The doctor would like to be informed as to any localities out of the City or in adjoining states in which the disease seems to be prevailing at present.

THE ANNUAL COMMENCEMENT exercises of the New Orleans Sanitarium Training School for Nurses took place June 21, when the following young ladies were graduated, presented with diplomas and awarded gold medals: Miss Rose Fitchett, of Canton, Miss.; Miss Belle Wilkinson, of Whitecastle, La.; Miss Jennie Close of Hammond, La.; Miss M. Ellis, of Castlebury, Ala.; Miss Edith Chapman, of Baton Rouge; Miss Helen Sanford, of New Orleans; Miss Annie Miller, of San Antonio, Tex.; Miss Nellie Weems, of Alexandria, La.; Miss A. Arbo, of New Orleans; Miss Fannie Minor of New Orleans, and Miss Marie Burandt, of New Orleans.

DR. JOHN W. THOMAS has been reappointed physician in charge of the Mississippi River Quarantine Station by Gov. Blanchard, a fit recognition of services well performed.

---

## Book Reviews and Notices.

---

*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

---

*Practical Gynecology*, by E. E. MONTGOMERY, M. D., L. L. D. P. Blakiston's Sons & Co., Philadelphia, 1903.

This is practically a new book; enlarged, better arranged, and containing newer features than its predecessor, which appeared in 1900. In the section on operative treatment the methods of different operators are

described and illustrated, as well as are those of the author. This is specially observed in the treatment of pelvic tumors and of retro-displacements of the uterus. The pessary treatment of the latter condition receives a thorough and most practical consideration.

The study of carcinoma of the uterus contains some new features particularly in regard to the late appearance of the carcinoma in the abdominal wall after the removal of the carcinomatous uterus by the abdominal route.

An exhaustive review of this practical and scientific work on Gynecology is beyond the limit of space allotted.

The reviewer can only say, after a careful study of this edition, that it is a great improvement on the first edition, and must prove itself a great and reliable friend to the general practitioner, as well as to the specialist.

MICHINARD.

---

*Diseases of the Eye*, by L. WEBSTER FOX, A. M., M. D. D. Appleton & Co., 1904.

A careful perusal of this work fails to carry the conviction that the author has accomplished the aim in view. While the language is simple and the arrangement of the matter good, the reader finds too many subjects dismissed with but a few remarks and others of importance not treated as fully as required for their proper understanding. In the chapter on operations, too much prominence is given to the so-called author's operations, to the exclusion of other well-known and probably better procedures—for instance, the McReynold operation for Pterygium is mentioned as one of the "others." The author's operation for divergent squint lacks originality—except probably the operating on both eyes at one sitting which we would mention but to condemn.

ROBIN.

---

*The Principles and Practice of Surgery*, by GEORGE TULLY VAUGHAN, M. D. J. B. Lippincott Co., Philadelphia, 1903.

This is an excellent manual for students, concise, but clear and attractive in its style, but it is hardly full enough to meet the wants of the general practitioner. It fails to mention some of the latest suggestions in surgical treatment, but it is reliable and satisfactory as a safe guide to the student, and as such is to be heartily commended.

PARHAM.

---

*The American Year Book of Medicine and Surgery*, by GEORGE M. GOULD, M. D. The Surgical Volume. W. B. Saunders & Co., Philadelphia, 1904.

This ever welcome volume maintains its high standard. No one who wishes to keep *en rapport* with surgical practice can afford to be without it. Everything worthy of note seems to have been included in the review of surgical literature for the last half of 1902 and the first half of 1903.

PARHAM.

---

*The Practical Medicine Series of Year Books*, issued monthly, Vol. II, *General Surgery*, Edited by JOHN B. MURPHY, M. D., November, 1903. The Year Book Publishers, Chicago.

This volume is particularly attractive. No attempt is made to review every article written during the current year, reference being given to those of practical importance, these being accorded adequate notice, being

sometimes, indeed, published in full. The well-known ability of the editor and his eminent fitness to select the articles really worth the notice of the practical surgeon have assured the great value of this review of surgery, and it will well repay any practitioner who desires to be posted on the real advance in practical surgery.

PARHAM.

*A Practical Treatise on Nervous Diseases*, by F. SAVARY PEARCE, M. D.  
D. Appleton & Co., New York and London, 1904.

This is a volume of four hundred pages and covers the subject of neurology in a satisfactory manner. The chapters on anatomy and physiology give a good account of that which is necessary for a proper understanding of the diseases to be described and this is followed by a short account of the general symptomatology and therapeutics. The descriptions of the various nervous affections considered are good. It is to be regretted that the formulary is not more extensive. While books of this type are not desirable, the one before us leaves little to be desired. The illustrations are good.

VAN WART.

*Lectures on Diseases of the Nervous System*, Second Series, by SIR WILLIAM R. GOWERS, M. D., F. R. C. P., F. R. S. P. Blakiston's Son & Co., Philadelphia, 1904.

The subject matter of this volume is formed by a collection of lectures which have been at various times delivered by the writer. They have been fully revised and brought up to date. The lectures on the subjective sensations are valuable as they bring our knowledge of these little-known subjects together. The other lectures deal with cases of rare nervous affections.

VAN WART.

*Commoner Diseases of the Eye; How to Detect and How to Treat Them*, by CASEY A. WOOD, C. M., M. D., D. C. L., and THOMAS A. WOODRUFF, M. D., C. M., L. R. C. P.

This little book offers the best presentation of the subject from the standpoint of the general practitioner of any yet issued from the press. The style tho' terse is smooth and agreeable and the authors have shown tact and intelligence in sifting the essential from the non-essential. It should be on the shelves of every physician who desires a polite knowledge of this branch of his art and is quite indispensable to the country practitioner who is often compelled to prescribe and care for diseases of the eye.

H. D. B.

*Atlas and Epitome of Operative Gynecology*, by DR. OSKAR SCHAEFFER, translated and edited with notes and additions by DR. J. CLARENCE WEBSTER, M. D. W. B. Saunders & Co., Philadelphia, New York and London.

This is one of the justly popular handbooks of the series published by W. B. Saunders & Co., and will prove a very valuable aid to every one interested in gynecological technic. The author, a well-known German teacher, has made a specialty of demonstrating by illustrations and this collection of water colors and pen and ink drawings showing the individual steps of operations is sufficient proof of the success of his methods. The work contains forty-two valuable and original colored lithographic plates, besides many text-illustrations, some in colors. Dr. Clarence Webster, so

well known to all of us, has added many comments and other notes which enable the reader to compare German and American ideas on various topics connected with technic. The work is a credit to the publishers, and it will rapidly gain that popularity which it deserves by virtue of its originality, its condensation and best of all the latest ideas from a foremost teacher regarding some mooted points in operative indications.

MILLER.

## Publications Received.

**W. B. Saunders & Co.,** Philadelphia, New York and London, 1904.

Nothnagel's *Encyclopedia of Practical Medicine*. American Edition. *Tuberculosis and Acute General Military Tuberculosis*, by Prof. Dr. G. Cornet, editor, with additions by Dr. Walter B. James. 1st Vol.

*Diseases of the Intestines and Peritoneum*, by Prof Dr. Hermann Nothnagel, editor, with additions by Dr. Humphrey D. Rolleston. 2d Vol.

*Obstetrics and Gynecological Nursing*, by Dr. Edward P. Davis. 2d Edition.

*Epilepsy and Its Treatment*, by Dr. William P. Spratling.

**A. S. Barnes & Co.,** New York, 1904.

*The Mother's Manual*, by Emelyn Lincoln Coolidge, M. D.

**The Year Book Publishing Co.,** Chicago, 1904.

*The Practical Medicine Series. Obstetrics.*

*The Practical Medicine Series. General Medicine.*

**E. B. Treat & Co.,** New York, 1904.

*Clinical Treaties on the Pathology and Therapy of Disorders of Metabolism and Nutrition*, by Prof. Dr. Carl Von Noorden.

*Transactions of the American Pediatric Society*, Edited by Dr. Walter Lester Carr.

**D. Appleton & Co.,** New York and London, 1904.

*Medical Diagnosis*, by Dr. William V. Leube.

*Röntgen Ray Diagnosis and Therapy*, by Dr. Carl Beck.

**F. A. Davis Co.,** Philadelphia, 1904.

*A Text-Book of Physiology*, by Dr. Isaac Ott.

*Modern Ophthalmology*, by Dr. James Moores Ball.

**E. H. Colegrove,** Chicago, 1904.

*Arteria Uterina Ovarica, or The Genital Vascular Circle*, by Dr. Byron Robinson.

**Lea Bros. & Co.,** Philadelphia and New York, 1904.

*Progressive Medicine*. Hare-Landis.

**William Wood & Co.,** New York and Philadelphia, 1904.

*A Plea for Justice to the Consumptive*, by Dr. S. A. Linopf.



**Miscellaneous.**

*Fourteenth Annual Report of the Eye, Ear, Nose and Throat Hospital of New Orleans, 1903.*

Major Harrison on the *Department of Health of Chicago.*

*Biennial Report of the Board of Administrators of the Insane Asylum of the State of Louisiana, 1904.*

*Biennial Report of the Louisiana State Board of Health.*

*Biennial Report of the Board of Health of the City of New Orleans, 1902-03.*

*Transactions of the National Confederation of State Medical Examining and Licensing Boards, 13th Annual Meeting.*

*The 30th Anniversary Celebration of the Entrance into the Medical Profession of Prof. John D. Shoemaker, M. D., L.L. D., by the Faculty of the Medico-Chirurgical College of Philadelphia, March 22, 1904.*

---

**Reprints.**

---

*Our Medical Colleges and Instruction of Examiners in Life Insurance,* by Dr. Francis A. Smith.

*Pulmonary Malingering,* by Dr. W. T. English.

*Typical Tuberculosis,* by Dr. John Aulde.

*The Practical Application of Cryoscopy to Medicine,* by Dr. John Henry W. Cattell.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)  
FOR MAY, 1904.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	10		10
Intermittent Fever (Malarial Cachexia) .....	2	4	6
Small Pox.....			
Measles .....	5		5
Scarlet Fever .....	1		1
Whooping Cough.....			
Diphtheria and Croup.....	3	1	4
Influenza .....		1	1
Cholera Nostras.....		2	2
Pyemia and Septicemia .....	2	1	3
Tuberculosis.....	43	44	87
Cancer.....	12	8	20
Rheumatism and Gout .....	3		3
Diabetes .....	3		3
Alcoholism .....	1	2	3
Encephalitis and Meningitis.....	9	8	17
Locomotor Ataxia.....			
Congestion, Hemorrhage and Softening of Brain.....	18	7	25
Paralysis .....	3		3
Convulsions of Infants .....	2	4	6
Other Diseases of Infancy .....	24	14	38
Tetanus.....		4	4
Other Nervous Diseases .....			
Heart Diseases.....	29	19	48
Bronchitis .....	8	6	14
Pneumonia and Broncho-Pneumonia.....	18	12	30
Other Respiratory Diseases .....	3	2	5
Ulcer of Stomach.....			
Other Diseases of the Stomach .....	3	1	4
Diarrhea, Dysentery and Enteritis.....	57	22	79
Hernia, Intestinal Obstruction.....	2		2
Cirrhosis of Liver.....	6	3	9
Other Diseases of the Liver .....	4	2	6
Simple Peritonitis .....	3	1	4
Appendicitis.....	4		4
Bright's Disease .....	21	14	35
Other Genito-Urinary Diseases.....	5	3	8
Puerperal Diseases .....	4	2	6
Senile Debility.....	16	3	19
Suicide .....	3		3
Injuries.....	8	12	20
All Other Causes.....	22	20	42
TOTAL.....	357	222	579

Still-born Children—White, 15; colored, 17; total, 32.

Population of City (estimated)—White, 233,000; colored, 84,000; total, 317,000.

Death Rate per 1000 per annum for Month—White, 18.38; colored, 31.71; total, 21.91

## METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure ..... 29.96  
Mean temperature ..... 74.  
Total precipitation ..... 4.31 inches.  
Prevailing direction of wind, southeast.

# *New Orleans Medical and Surgical Journal.*

---

VOL. LVII.

AUGUST, 1904.

No. 2.

---

## Original Article.

---

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints may be had at reasonable rates if a WRITTEN order for the same accompany the paper.]

---

### Summer Diarrhea of Infants. \*

By LOUIS M. WARFIELD, A. B., M. D., Savannah, Ga., Formerly House Medical Officer  
The Johns' Hopkins Hospital.

It has been my good fortune to be personally acquainted with many of the pioneers in the field, to work with them in the laboratories, hospitals and dispensaries, and to see the difficulties attending the unraveling of this question of the etiology of the Summer Diarrheas.

Summer Diarrhea of Infants as a disease *sui generis*, dates from the appearance of Benjamin Rush's paper in 1777, entitled: "An Inquiry into the Cause and Cure of The Cholera Infantum." The disease seems to have been unknown to the Indians, and very early settlers, possibly as Brooks suggests, because physicians had very little chance to study such disorders and obtain statistics as to their frequency. Digestive disturbances in children were

---

\*Presented to the Georgia Medical Society June 21, 1904.

looked upon as ailments that had to occur, and could be treated by old women and ignorant nurses. That the disease was known to the ancients, is shown by references to it in works dating from the 2d century, A. D. It was recognized that the summer time was not only the season of greatest incidence, but also of greatest mortality.

It seems curious then that it was not until nearly the beginning of the 19th century that the disease received attention. After the publication of Rush's paper, it was nearly half a century before the physicians of Europe recognized the importance of the disease. It was supposed to be peculiarly an American disorder, and was said to occur only sporadically in Germany, France and England.

Various factors were blamed as causes of the disease. It was thought that the atmospheric temperature alone, a mean of 60° F., was sufficient to cause an epidemic. Some looked on teething as the chief cause, as in most cases the disease was preceded by the diarrhea of teething. Others saw in the food of the infants the primary factor in the disease. Very naturally the views that prevailed before the Bacteriological era of modern medicine with regard to epidemics in general were also believed to hold good for the Summer Diarrheas. With the discovery of bacteria, and the development of the bacterial origin of disease, new ideas began to creep in among the old views as to the causes of Summer Diarrhea. To Escherich in Vienna, and Booker in Baltimore, is due all praise for the first careful work on the bacteriology of the stools of infants with Summer Complaint. Each observer separated out a number of organisms, mostly bacilli, allied to the colon group of bacteria, to no one of which, however, could either investigator claim absolute specificity. In fatal cases streptococci were practically always found. Some have tried to separate a special streptococcic diarrhea, but it is certain now that the cocci are terminal invaders, as they are in many other affections.

Fresh vigor was put into the subject of dysentery in 1898 by the discovery of Shiga, a Japanese investigator, of the specific organism concerned in tropical epidemic dysentery in Japan, the *B. dysenteriae*. Flexner and Barker of Manilla, Kruse in Germany, found similar organisms in epidemics of dysentery and confirmed Shiga's results in general although disputes arose as to minor differences in races or strains of the organism. These points, however,



can not be discussed in the limits of this paper. Suffice it to say that not only in tropical epidemic dysentery was this organism constantly present in the stools, and showed the specific agglutination with sera obtained from patients ill with the disease, but it was also found in sporadic dysentery, and in the terminal dysentery of asylum patients.

Bacteriologists, especially in America, then turned their attention to infants in the hope of throwing some light on diarrheal diseases with the help of the new technique developed in the search for the dysentery organism. Flexner, at that time (1902) Professor of Pathology in the University of Pa., sent one of his pupils, Duval, a man who had had considerable experience in the specific technique, to the Thomas Wilson Sanitarium near Baltimore, Md. The opportunities for studying cases of diarrhea were excellent. The previous summer (1901), during the writer's service, over 400 infants and young children were admitted, the large majority of them suffering from diarrhea. Duval tried first agglutinations with the blood serums of babies ill with diarrhea on known varieties of dysentery bacilli, cultivated from the stools of adult patients. The agglutinations were marked, rapid and occasionally in very high dilution. He and Bassett succeeded during the summer of 1902 in obtaining bacilli in 42 out of 45 cases. The bacilli could not be obtained from stools of healthy children, or those suffering with other diseases. This discovery started other investigations on the same lines, and confirmation of the work was not long in coming forward. At first the bacilli were isolated only from bloody mucous stools or stools containing a great deal of mucus. However, with improved technique and experience with the organism, the bacillus was obtained from cases showing only small traces of mucus. In fact Duval was in the habit of saying that he thought that in any diarrheal stool containing even a very small amount of mucus, the dysentery bacillus could be found.

The results of the collective investigation under the auspices of the Rockefeller Institute for Medical Research carried out in certain eastern cities during the summer of 1903, has confirmed the work of Duval and Bassett. Hastings in Boston; Duval and Schorer, Wollstein, and Cordes in New York; Bassett in Baltimore, have succeeded in obtaining the bacilli in a large proportion of

cases. The specific agglutinations in these cases were always present. The evidence then goes to show that Summer Diarrhea is a very definite condition caused by one organism, viz., the *B. dysenteriae Shiga*.

That other factors are concerned as well in the production of the disease is conceded by all. As in every infectious disease the soil must be ready to nourish the seed. It is of course possible that the *B. dysenteriae* may lead a saprophytic existence in the intestinal canal until conditions occur which allow of its rapid multiplication. The possibility, however, of finding a dysentery bacillus among the billions of other organisms in the feces, is remote enough to be absolutely impossible. One observer claims to have found dysentery bacilli in the stools of healthy children during an epidemic of dysentery (Strong). So far as I know this is an observation that has not been confirmed.

The term Summer Diarrhea is in a certain sense a misnomer, as the disease with all its characteristics occurs throughout the year, in short where the conditions are fulfilled for the production of the disease, the two essentials being a suitable intestinal tract and the dysentery bacillus. It is, however, in the summer that the various factors, that make up the accessory conditions for the development of an epidemic, are more potent. Then it is that milk is more apt to be badly contaminated, it alone being able to set up digestive disturbances that prepare the soil for the dysentery bacilli. There can be no question too, that the depressing effect of a high atmospheric temperature is a powerful accessory factor in the production of the epidemic that occurs in July and August of every year in the large cities of our continent.

The highly interesting and instructive report of Drs. Park and Holt, shows very conclusively the influence of impure milk, lack of intelligent care, dirty surroundings and high temperature on babies in the New York tenement districts. They say: "It was practically the unanimous opinion that the most important factor in securing good results is intelligent care. This covers merely: clean bottles and nipples; the willingness and ability to carry out directions as to methods of feeding, quantities, frequency, the stopping of milk at the first signs of serious diarrhea, etc.; proper care of the milk itself while in the house, and methods of sterilizing; suitable clothing and cleanliness of the children, and as much

fresh air as possible. Most of the physicians stated that, leaving out the very worst store milk in summer, the results were much less affected by the character of the milk, than they had anticipated, and distinctly less than by the sort of care the infants received.

“The surroundings alone had much less influence on results than was anticipated. For not only were breast-fed infants found doing well under the most unfavorable surroundings, but those also who received only the bottle as a rule did well, provided they received intelligent care and good milk.

“The depressing effects of great atmospheric heat, *i. e.*, a temperature in the neighborhood of 90° F. or over, were very marked in all infants no matter what their food. Those who were ill, were almost invariably made worse, and many who were previously well became ill.” It seems highly probable then that the dysentery bacilli are present in the normal intestinal canal. We have not yet reached the bottom in our classification and differentiation of allied species of bacteria, hence, it is just possible that the dysentery bacillus, as it grows on suitable living culture media, and the dysentery bacillus living a harmless existence in the intestinal canal, will not grow in a similar manner on artificial media, under artificial conditions. Who can say positively that of several different strains of colon bacilli cultivated from a healthy stool, one or more might not under favorable conditions, take on the characteristics of the dysentery bacillus, multiply to the exclusion of its fellows, produce its specific toxin, and then be found in such enormous numbers in the stools, that the question of its specificity cannot be doubted. The writer believes firmly that a bacillus capable of producing the clinical symptoms of dysentery and presenting the cultural characteristics, as we now know them, on artificial media of the dysentery bacillus, is a normal inhabitant of the large intestine.

To come back to facts, we have as the result of the most recent work, the following brief summary. The *B. dysenteriae* is the specific organism concerned in the disease. It is found in every case when blood and mucus are in the stools, in every case where there is mucus present (Duval); in the large majority of cases where mucus is present in appreciable quantities (Wollstein, Hastings, etc.). It is not known positively whether the *B. dysenteriae* is present in the healthy intestine. Possibly it is. It may be



taken into the intestinal canal in the unboiled water used to dilute milk for feeding (Bassett). It may possibly be in the milk. As most milk is now sterilized or Pasteurized, before feeding, the danger from that source is minimized.

The symptomatology and pathology are now so well known, that I shall pass over them. Just a word, however, as to some of the newer pathology. The *B. dysenteriae* as a rule is not found in the internal organs. The disease does not seem to be a general bacterial disease, like typhoid fever, with localized intestinal lesions. Dysentery seems to be a disease due primarily to the absorption of toxins from local bacterial growth. The injection of the toxins into the skin causes, besides a rather marked local reaction, fever, headache, prostration, but no diarrhea. Howland has recently described four groups of lesions of the intestine due to *B. dysenteriae*, from the simple hyperplasia of lymphoid tissue to the pseudo-membranous form, in which he describes the false membrane as formed of necrosed tissue, of cellular debris, and masses of bacilli.

*Prophylaxis.*—Much can be done to protect infants from diarrheal diseases. The success attending the persistent efforts of the New York City Board of Health, shows that, however bad the surroundings, and however ignorant the mothers, by persistent efforts, the sickness and mortality can be markedly lowered. Most important of all as quoted above is intelligent care. By this we mean cleanliness in the child and his clothing; attention to the mouth, to the amount and kind of clothing worn by the infant. Babies should be dressed to suit the atmospheric temperature. How often have we seen puny babies so overloaded with clothes that it seemed impossible for them to breathe?

Napkins should be changed as soon as soiled, and in institutions, where many babies are, they should be thrown at once into some antiseptic solution. We can no longer question the fact that infection can be carried from one infant to another by a third person. It is possible that flies play some part in spreading the infection.

Any mild intestinal upset should be immediately cared for. To look on an irregularity of the bowels as something that must occur with the eruption of every tooth is, in summer, to jeopardize the life of the baby. No diarrheal condition in summer is trivial enough to be passed over as teething, or the like. It can be laid



down as a rule from which there are no exceptions that diarrhea in warm weather is always a serious condition.

It goes without saying that if the baby is artificially fed, the milk should be of an approved standard, and the bottles and nipples should be kept scrupulously clean. It is bad practice to wean a baby during or just before the beginning of summer. Another important point to remember is that in hot weather the tendency is to over-feed, and to give too little water. A fretful child may have cool boiled water frequently, but the feedings must be as regular as the clock. Fresh air is of the utmost importance. Children should be taken to the country whenever possible. Even day excursions have proved to be of great benefit. It is after all intelligent care, with all that it implies, that has lowered the mortality and sickness among babies.

*Treatment.*—In the treatment of diarrhea in a child the point to be kept in mind constantly, is that there is some irritation in the digestive tract. Where irritation is, it must, if possible, be removed immediately, before anything else is done. What was the primary cause of the infection should be sought for, and means taken to keep away the agent.

We may divide the treatment of Summer Diarrhea, for convenience of description, into: (a) Hygienic; (b) Medicinal; (c) Mechanical; (d) Specific.

(a) We have already spoken of the care that must be exercised to prevent the infection of babies. It is only necessary to remember in the hygienic treatment that we are dealing with an infection of the intestinal tract primarily. The infectious agent is in the stools, and from there can be carried to other children. Attention to the minutest details in cleanliness and care is all-important. Infants should be lightly clothed, kept if possible out in the open air, should sleep in a well ventilated place. Napkins should be changed as soon as soiled, and the buttocks bathed in some antiseptic solution, then powdered with a sterile powder.

(b) The first thing to do when called to see a child in good condition, who has a history of 15 to 20 stools in the past 24 hours, is to give a purge. Under no conditions should the attempt be made to "check" the diarrhea by giving opiates. Babies are killed not cured by such treatment. The diarrhea is an evidence of irritation. The intestines by hurrying onward their contents seek to throw

off the harmful products, and while they may be able to do it unaided, it is always the part of wisdom to assist nature. Either calomel in divided doses until purgation is free, or large doses of castor oil can be given. If there is vomiting and nausea, the calomel is probably to be preferred. The next step is to stop all milk for at least 24 hours. Children at the breast should not be allowed to nurse for that time. It is better to give nothing but boiled water. That is, however, a difficult matter for a mother to consent to do. An excellent plan is to give weak tea. The little caffein acts as a mild stimulant, and the anxious mother's fears of starving the baby to death are as a rule satisfied. The following day, if the diarrhea continues, after we are sure the purge has acted well, some intestinal astringent may be given. In the writer's experience no drug is better than bismuth subnitrate. With this may be given paregoric or deodorized tincture of opium. Tannigen et al may be used, but none of the preparations recently introduced are any better than bismuth. It goes without saying that strychnin, camphor, brandy, digitalis and other stimulants must be given as required.

(c) Under this heading we include irrigation of the stomach and bowel, and baths and packs. If an infant is seen in the very beginning of an attack, when the vomiting is extreme, it is good practice to pass a soft tube down the esophagus and wash the stomach with luke warm water. I have never known a baby so collapsed at outset that this could not be done if care were exercised, and I have never seen any harmful effects follow stomach lavage. At times it is well to irrigate and wash the colon at the same time. Castor oil or calomel can be put directly into the stomach through the tube. The stomach lavage is frequently the best means we have of stopping the constant retching and vomiting.

If by the fourth or fifth day of illness, the stools still contain mucus and undigested material, and are from 4 to 8 a day, colon irrigation can be used to advantage. This is best done in the following manner. The nurse holds the infant's head to the left, on her lap. She rests the right foot on a stool so the child's buttocks are elevated. With the left hand she holds a rubber sheet around the child's waist, and so arranged that it protects her clothes and drains off into a bucket at her right side. With the right hand

she holds the child by its ankles. For irrigation one uses a fountain syringe and a soft rubber catheter, about No. 20 French. A piece of glass tubing makes the connection between the catheter and the tube of the syringe. As irrigating fluids one can use warm normal saline, sodium bicarbonate (3i-Oi), or various astringents. If there is much mucus, one should use the soda solution, as that dissolves the mucus and more effectually cleanses the mucous membrane. The child is firmly held by the nurse, so that the head is much lower than the buttocks, and the catheter, well oiled, is passed into the rectum. It soon reaches the sharp bend of the sigmoid flexure. Now by carefully allowing water to run in and distend the gut slightly the catheter can be readily passed up the descending colon, even to the transverse colon. With the catheter in as far as it will go, care being taken it is not doubled on itself, the flow is started. The colon is filled, the position of the child allowing the water to flow up the colon, the flow stopped, the catheter disconnected at the glass joint, and the contents of the gut allowed to flow out. As the irrigation proceeds, the catheter is turned from side to side and gradually drawn out, so that the colon gets a true washing. Irrigation is done until the return flow comes away clear. Irrigation at first may be done twice a day, later once in two days.

For the fever and irritability, warm full baths can be given, also sponge baths with cold water, or dilute alcohol. If collapse supervenes, the mustard bath is an excellent general stimulant. Subcutaneous saline infusions can be given in the tissues of the breast or buttocks. I must confess I have never seen a case that I considered saved by saline infusion, nevertheless I always use it, sometimes early, sometimes late in the disease.

(d). When the cause of Summer Diarrhea was discovered, it was fondly hoped that we might be able to immunize animals and obtain a curative serum. Experiments made on laboratory animals showed that the serum from a horse, which had received for a period of nine months to one year increasing doses of virulent bacilli, would protect against fatal doses of the dysentery bacillus. Also it was found that if the animal were inoculated with a fatal dose of bacilli, and later given antitoxin, the animal could be saved in many cases, if the curative serum was not too long withheld. In Japan Shiga had already prepared a horse serum, and had found that the serum when given to patients



suffering with dysentery caused a rapid amelioration of all symptoms, and seemed to be a specific for the disease. Rosenthal has recently published from Gabietchewski's clinic, a series of cases treated with serum. The results were all that could be desired. Cases also in this country were treated, especially asylum dysentery, with most satisfactory results. It seemed then that we had at last found a specific for Summer Diarrhea. Trial was made, but the results cannot be said to be brilliant. The experience of La Fetra and Howland, and the writer in New York, of Hastings in Boston, and of Knox in Baltimore, during the summer of 1903, showed that while in some cases the serum seemed to do good, in other cases and those the very cases where we looked for results, it did no good. So many factors enter into the question of infant disease, that it is hardly right to expect too much of one cure. The intestinal tract is diseased, and the problem is complicated by the question of nourishment. Suppose we do neutralize the toxins of the dysentery bacillus. There is still the problem of feeding the child which is ever before us and the chance of secondary infection is great. In at least one case I saw last summer in a child  $2\frac{1}{2}$  years old, who became suddenly ill with loose stools that soon became bloody and mucous in character, 10 cc. of serum apparently stopped the dysentery and the acute symptoms in less than six hours. By the following day the stool was fecal in character, and by the third day the stool was normal. Could we be sure that all our cases were uncomplicated dysentery bacilli infections, we could hope for much from the serum. Unfortunately in infants it is no simple infection. The serum does, however, no harm. I have given 20 cc. at one sitting to a child nine months old, and to one child of the same age over a period of ten days I gave 150 cc. I saw no bad effects of any kind. Others so far have seen none. It is well I believe in cases that begin furiously, and soon show bloody mucous stools, to use the serum at once. Such cases even in infants may be helped. As a rule, however, these cases are not as common as the cases with diarrhea for a week to a month, then blood and mucus in the stools, a sign of ulceration of the bowel. Further trial of the serum is urgently needed before any very definite conclusions can be drawn. The above are only impressions gained by using the serum on a few cases. It is to be hoped that further experimental work will produce a more potent serum. At present one



has no idea how many units he is using when he injects 10 cc. Possibly a concentration of the serum will give us the results we are looking for. In the meantime we can do a great deal to prevent Summer Diarrhea by careful supervision of our municipal milk supply, our water supply, and by instructing mothers in the care of the infants. Then should, in spite of our precautions, the disease break out, we must treat it energetically with the means at our command.

## REFERENCES.

Duval and Bassett.—The Etiology of the Summer Diarrheas of Infants. Prelim. Note.

*Centr. f. Bakt.*, I, Orig. Bd. XXXIII, 1903.

Booker.—The Early History of The Summer Diarrhea of Infants, *Arch. Ped.*, 1900.

Wollstein.—The Dysentery Bacillus in a Series of cases of Infantile Diarrhea. *Jour. Med. Res.* Vol. X, No. 1, 1903.

Howland.—The Pathological Anatomy of Shiga Bacillus Infections of the Intestines in Infants.

*Proc. N. Y. Path. Soc.* Vol III, (N. S.), 1903.

Duval and Scherer.—Results of the Examination of Seventy-nine cases of Summer Diarrhea. *Ibid.*

Wollstein.—Results of the Examination of Sixty-two cases of Diarrhea in Infants. *Ibid.*

Cordes.—Results of the Examination of Fifty-one cases of Gastro-Intestinal Disturbance in Infants and Children. *Ibid.*

Park, Collins and Goodwin.—The Results of an Investigation upon the Etiology of Dysentery and Acute Diarrhea. *Ibid.*

Shiga.—*Cent. f. Bakt.*, 1898, Nos. 23 and 24.

Flexner.—*John Hopkins Hosp. Bull.*, Oct., 1900.

Strong.—Shiga's Bacillus in Epidemic of Dysentery. *Bost Med. and Surg. J.*, Mar. 26, 1903.

Kruse. *Deutsche Med. Woch.* 1900, 1901, 1903.

Vaillard et Dopter.—La Dysenterie Epidémique, *Annal. de l'Inst. Pasteur*, Vol. XVII, 1903.

Park and Holt.—*Arch. of Ped.*, Dec. 1903, p. 881.

La Fetra and Howland.—*Ibid.*, Mar. 1904, p. 161.

Hastings.—*Jour. A. M. A.*, XLII, April 30, 1904.

Shiga.—*Deutsche Med. Woch.* 1901, XXVII, 741, 765, 783.

Rosenthal.—*Ibid.*, 1904, XXX.

Gay.—Univ. Penn. Med. Bull, July and August, 1903.

## Louisiana State Medical Society Proceedings.

[EDITED BY PUBLICATION COMMITTEE.]

I. I. Lemann, M. D., Chairman.

### The Value of the Axis Traction Forceps in Certain Conditions —Report of Cases.

A. C. KING, M. D., New Orleans, Chairman Section on Obstetrics.

Prof. Lusk's opinion of the axis traction forceps is quite forcibly expressed when he says, "To one accustomed only to the familiar forceps, the facility with which delivery can be accomplished by Tarnier's instrument would seem hardly credible." Prof. Tarnier of France is the originator and inventor of the axis-traction forceps, but it is said of him that not until ninety-nine models had been rejected would he accept the hundredth as fulfilling all the requirements of an instrument intended for high operation and especially difficult cases, and gave to the world an instrument that has without a doubt saved many hundreds of both maternal and fetal lives. There is a variety of excellent modifications of this instrument but the majority of operators still prefer the original pattern. Even the distinguished Lusk candidly admits his liking for the original instrument having the backward curve in preference to the inventor's latest model in which he has restored the ordinary pelvic curve. No extended description is necessary here, as that can be had from any reliable work on obstetrics, but I have thought proper to exhibit the instrument simply to show the difference in appearance of the different models.

This instrument is essentially for use in high operations, but can be used in other difficult conditions where the ordinary forceps does not fulfill the indications. It should be used with some skill and a reasonable amount of care or considerable damage may result; for instance, when the presenting part is at the lower strait it is quite easy for the posterior borders of the blades to cut deeply into the vaginal wall. Tarnier for this very reason is supposed to have changed his instrument to the ordinary pelvic curve. The

perineum also is in great danger of laceration by the traction rods on account of the backward pull, hence it is a good plan, where you have intelligent assistants, to protect it for a time by inserting a Sims speculum between the rods and perineum. It is astonishing to see to what a terrific strain this particular part can be subjected by other objects than the fetal head and not tear, and the great wonder is that tears are not more frequent and very much more extensive than is usually the case. We can thank muscular elasticity for this very fortunate condition of affairs.

There is a class of men to whom the axis traction forceps is particularly valuable, because it requires a lesser degree of *main strength* to overcome certain obstacles to delivery than is the case in using the ordinary instrument. I refer to those, who, like myself, are not physically strong. Unfortunately the demands upon the average physician's time are so great as to leave little time for gymnastic work or other forms of exercise calculated to develop the muscular system and I dare say that the majority of us are below the average man in point of physical strength and at no time in a physician's life does he feel the need of great muscular energy than during the trying ordeal of a difficult instrumental delivery. We are taught that brute force should never be used in effecting a delivery and there is probably not one present who can conscientiously gainsay this teaching, yet I have frequently had occasion to observe that a combination of main strength and skill accomplished far more than either could have accomplished singly.

The advantages of Tarnier's instrument over the ordinary forceps are:

1st. The backward or Tarnier curve makes it possible to adjust the blades to the sides of the pelvis at the brim, without subjecting the soft parts in front or the perineum behind to too great pressure.

2nd. Traction is made directly in the axis of the pelvic curve instead of forward against the pelvic symphysis as is usually the case in high operations when the ordinary forceps is employed.

3rd. The traction rods permit more freedom of motion to the head than the usual forceps.

4th. There is less probability of the blades springing apart on account of the solidity of the shanks, and the retaining effect of the traction rods, especially *during* tractions.

5th. It possesses the advantage of acting as a double compressor,

first, by means of the transverse screw crossing the handles behind the lock and secondly by the same retaining effect of the traction rods, referred to above.

We can take the word of an eminent authority for it that the amount of pressure upon the head requisite to keep the instrument from slipping has been found in practice not to prove an element of danger, provided there be frequent let ups on the pressure between tractions; this is done by simply loosening the transverse screw. This statement does not always hold good if the child be premature, for it is a well recognized fact that premature infants do not bear instrumental delivery well.

Several years ago I had occasion to administer the anesthetic in a case of difficult labor, and witnessed my first and only perforation. As near as I could learn at the time the difficulty was due to a moderately small inlet, how small I do not know as no measurement had been taken. Engagement L. O. A. with partial descent and the head well jammed. The attending physician applied the Elliott forceps and made faithful efforts to deliver but failed, then used the Holt instrument with a similar result; again tried the Elliott and failed a third time. At my suggestion hurried efforts were made to secure the services of some one who had a Tarnier forceps and though several telephone messages were sent to some of our specialists we were not successful.

Version at this stage of the game was out of the question, so perforation had finally to be done on a living child. I believe to this day that with the axis-traction forceps this child could have been saved. I profited by this experience as will be shown in the following cases, the relation of which I hope will be of assistance to some one when in a tight place.

CASE 1.—Was the lady just referred to. The physician who attended her having died, my services were engaged for the next confinement. I completed my obstetrical outfit by purchasing a Tarnier's forceps, perforator, etc. Labor came on in due time and engagement occurred L. O. A. as in the previous labor, and for a time all went well. The head appeared to be of medium size, the child vigorous and mother in excellent condition. I watched the case closely and with considerable interest from 7 p. m. until 3 a. m.; from about 12 to 3 no progress seemed to be made so instrumental interference was decided upon. Two assistants were summoned and



the history of the previous labor related. Examination was made and the opinion expressed that delivery could be easily accomplished with the ordinary forceps. Preparations made, patient anesthetized, then I applied the Hodge instrument and made careful attempts to deliver, took off the forceps, reapplied, and made another effort and not succeeding asked the consultant to try. He did so, faithfully and manfully, quite manfully and with considerable muscular energy, yet with no success after half an hour. Then I applied the Tarnier forceps and delivered a nine pound living child in about fifteen minutes. I was about as much surprised as any one present, I honestly confess. In this case it was a great temptation to induce labor at eight months, but the mother would not give her consent. Version seemed to be indicated at the beginning of labor, but the result could not have been better.

CASE 2.—Midwife in attendance. Os well dilated, head L. O. P., high up and well jammed. Pains strong and expulsive in character but accomplishing nothing. I applied the Hodge forceps first and made every effort to deliver, but without success; then I put on the Tarnier forceps and dislodged the head, bringing it well into the pelvic cavity and was about to remove the Tarnier when, much to my surprise, rotation occurred, the first time I had ever seen it happen while the head remained within the grasp of the blades. Delivery completed with short forceps. Child alive, weighing 8½ pounds. No lacerations.

CASE 3.—Wife of a physician; primipara. Head engaged L. O. P., and remained in this position. After waiting a reasonable length of time the Hodge instrument was applied and some time spent in unsuccessful attempts to deliver. Put on the Tarnier forceps and brought the head well down, removed it, allowed a few pains to occur with the result of bringing about rotation and delivery. Child weighed 9¼ pounds and living. In this case one blade of the Tarnier forceps cut into the posterior vaginal wall moderately; this of course being sutured at once.

CASE 4.—Also a physician's wife. Primipara, rather undersized and having a small pelvic cavity. Engagement L. O. A., labor tedious. Hodge forceps were applied after I had given the mother every opportunity to deliver herself. The case promised to be comparatively easy, but proved otherwise. Every effort possible was made to deliver with the Hodge but without success; the head would not budge though comparatively low in the pelvic cavity. I

removed the Hodge and applied the Tarnier and even with this instrument delivery was slow and exhausting, but was finally accomplished, a living boy weighing eight pounds being born. This baby's head was a curiosity in shape; it resembled more than anything else a rather fat cucumber, measuring  $7\frac{1}{4}$  inches in the occipito-mental diameter and  $3\frac{1}{4}$  bi-parietal. The perineum in this case was lacerated down to the anal sphincter; sutured twelve hours later, owing to the mother's condition at time of delivery.

CASE 5.—Second pregnancy. First labor instrumental, child still born. I assisted the attending physician and know that the delivery was exceedingly difficult. Elliott forceps used after the Hodge had been tried, and slipped several times. Case was in my hands for the second occasion and permitted labor at eight months, which was induced by the bougie method. Pains strong and regular, os dilated fairly well but the head remained high. This case was one of the variety occasionally met with where the woman is large, with a small pelvic cavity. The Hodge forceps failed as usual in this class of cases so the Tarnier was applied and delivery of a living child accomplished in about twenty minutes. The pressure, however, had been quite severe and this baby lived but two hours. No lacerations. In this case I am inclined to believe that version would have been better.

The five following cases occurred in the practice of Dr. A. J. Babin, who kindly permits me to report them. I enjoyed the privilege of assisting him on each occasion.

CASE 6.—Primipara. Head engaged R. O. P. and remained in this position in spite of efforts to rotate. The Elliott forceps applied and efforts made to deliver. Then the Hodge was tried with no better success. The Tarnier was then used and a living child weighing nine pounds soon delivered with a moderate amount of difficulty. Perineum partially lacerated and repaired at once.

CASE 7.—Primipara. Engagement L. O. P. Efforts to rotate unsuccessful. Hodge forceps failing to deliver the Tarnier was applied and a living child delivered with great difficulty. Child was partially asphyxiated but was soon restored. Considerable perineal laceration, with immediate repair. In this case rotation occurred after removal of the forceps.

CASE 8.—Primipara. Pelvic inlet below the average on account

of a prominent sacral promontory. Engagement L. O. A. Elliott forceps used unsuccessfully. Tarnier applied and delivery accomplished without much difficulty, child weighing ten pounds. It was pretty well asphyxiated and required some time to bring about recovery. Complete perineal laceration, with immediate repair.

CASE 9.—Second pregnancy; first instrumental, with still-born fetus. Pelvis rather masculine. Labor spontaneous at 8 months. Engagement R. O. P. Elliott instrument used without success. Tarnier applied and the child delivered with comparative ease, rotation occurring after removal of the Tarnier; Elliott used to complete delivery.

CASE 10.—Primipara. Engagement L. O. P. Hodge forceps used to no advantage. Elliott then tried with the same result. Tarnier applied and the head brought down with considerable difficulty, then removed, rotation occurring very nicely. Elliott then used to complete delivery. Baby weighed ten pounds. This case has since been successfully delivered by podalic version.

In each of these cases every effort to deliver was made before resorting to the Tarnier forceps, and it is probable that without this instrument at hand most or all of the ten infants would have been sacrificed in the interest of the mothers, or would have been fatally injured by prolonged manipulation.

#### DISCUSSION.

DR. E. L. McGEHEE, of New Orleans: I endorse the paper thoroughly. Only last Sunday I wished for a Tarnier forceps. I was called to see a case and found the physician with unusual skill and a pair of Holt's forceps, which he quickly and accurately applied to the head, but could do nothing with them, so we had to turn and deliver. Anyone who has used the Tarnier forceps will never question its value. There are extra handles that can be adjusted to Elliott or Holt forceps which cost but little yet direct the traction force in the line of the axis of the pelvis.

DR. A. C. KING, in closing: I have nothing more to add to what I have said, but if a man has ever been caught in a tight place once it is a mistake for him to be caught again. I use the old forceps and they are all right but there are some cases which I cannot manage without these forceps.

**Dysmenorrhoea. A Plea for a More Thorough Study of its Etiology, With Special Reference to the Abuse of Lax Surgical Methods in its Treatment.**

By S. M. D. CLARK, M. D., New Orleans.

It has been quite a task to determine upon some subject appropriate for this occasion. It has been my desire to select some topic of practical value and one in which the general practitioner would feel the same propriety in discussing as would the specialist. After casting around for some time for a subject, I have, with some hesitancy, selected the consideration of one of the disorders of *menstruation*, dysmenorrhoea.

Any disorder causing the same distress and misery as is embodied under this troublesome heading is worthy at all times for the serious consideration of any medical body. Is there not an increase in the number of women who have their menstrual function seriously crippled? Though this phenomena, which when occurring in a healthy individual, should be painless, is it not one of the distressing experiences of the gynecologist that he is coming in daily contact with seemingly more serious and wrecking type of this disorder?

The normal menstrual phenomena, from a physiological standpoint is still an unsettled problem, and up to the present time is beyond the human comprehension. It is commonly looked upon today as a nervous influence, which proceeds periodically from the sympathetic ganglia in the lower abdomen and pelvis, stimulating and congesting the sexual organs. The nerve influence controlling menstruation can no more be accounted for than the nerve force which continues respiration from the moment of birth to that of death. Dysmenorrhoea is simply a term used to express the presence of pain accompanying the menstrual effort, and Kelly states, very correctly, that it should never be entered upon a history sheet as a diagnosis. It is no more a diagnosis than is jaundice or dyspepsia, but is a local expression of either a constitutional or pelvic disturbance. It is nothing more or less than pelvic pain associated with the menstrual flow and congestion, and is a concomitant of a wide variety of diseases of the part or whole. For the last twenty-five



years gynecologists have been battling with this serious problem and attempting to properly classify the symptoms according to their various causes, but as yet have settled upon no satisfactory grouping. For our purposes, it will suffice to consider it in the light of originating from causes in the pelvis and those elsewhere. We recognize that it is produced in various ways, by various conditions of the general system, by various pathological conditions of the pelvis, and sometimes reflexly from other organs of the body.

In a paper of so short a character it would be an utter impossibility to even briefly review or touch upon each of the various causations of this most distressing symptom. Therefore, only a limited number of the different types will be discussed on this occasion.

One of the most distressing types of painful menstruation encountered by the gynecologist or general practitioner is that found in young women. The usual history of these cases is that at the first menstrual period, which as a rule appears late, they experience severe cramping pains in the lower portion of the abdomen. After completing the first period, which is usually scant and of short duration, and through which the girl comes very much depressed and weakened, she goes from month to month with a gradually increasing pain, until finally the physician's advice is sought, who, in the majority of cases, gives anodynes without making any further examination, simply treating the symptoms *per se*, and not attempting to determine the true cause of the pain. The greater number of these girls are strong and healthy before the beginning of puberty, but after going through four or five years of much pain and torture they become nervous and irritable, they lose flesh, their nutrition is poor, their skin becomes yellow, they are anemic, and in time they are in a truly hysterical state. The question of making a vaginal examination in the virgin is a point worthy of consideration at this juncture. This can be done without producing any excessive pain, much pain being eliminated if a small amount of cocaine be used just at the upper portion of the vulva, between the small labia. In quite a number of cases the examination, by means of the rectum will serve the purposes of the examiner. Should the rectal examination not enable a thorough mapping out of the organ, the vaginal tract should be used, where never more than one finger is necessary, when with extreme care and plenty of time one is able to accom-

plish satisfactory results. The propriety of administering a general anesthetic to young women is in many cases advisable, not only enabling the examiner to make a more perfect exploration, but also to avoid the moral shock that accompanies such exposure.

In examining cases giving the history above related, one usually finds a very small undeveloped uterine body, which is anteflexed to a more or less pathological degree. As a rule the cervix will be extremely soft and composed of but little more than the connective tissue and mucous membrane surrounding it, there being but little muscular tissue, it being materially undeveloped. Further than this, the pelvic examination will be negative. These cases from month to month develop a more marked general disturbance, the sympathetic nerve system becomes more irritated and finally upsets the general rhythm of the organs of the body, the heart, kidney, stomach, etc; further ending in a disturbance of the general nutrition and subsequently producing a marked anemia and pronounced neurasthenia. We have here an undeveloped organ, in a true embryonic state, in which flexions of all character is favored. The long flabby cervix is not due to an hypertrophy but is simply due to the lack of muscular tissue within the normal mucous membrane. If the muscular tissue of the cervix could be increased, the diameter would be increased and the length of the cervix naturally shortened. If the cervix which is found to be soft and flabby could be filled out with muscular tissue, it would become normal in proportion. The point at which the muscular tissue is least developed is found at the seat of flexion. This organ in its undeveloped state has been likened to a loose stocking with nothing in it, liable to bend in any direction. Here we have a condition in which the treatment is to be aimed at attempting to encourage the production of normal muscular uterine tissue. What will we do with this type of dysmennorrhoea, recognized as coming from an undeveloped uterine body? It seems that in just this type of cases the gynecologist is able, by properly correcting the life and course of young women, at this most impressionable and susceptible age, will, in a large measure, be able to prevent the establishment of a pain which may end in agonizing distress and invalidism. How many of us take the trouble to instruct the mothers as to the course best to pursue in guiding their daughters in the proper establishment of this most important phenomena. During the time of puberty, the woman's

entire being is influenced, her physical endurance, mental acumen, and capacity in all directions are affected. The depression and nerve tension at this time is at its height. In young girls, just being ushered into womanhood, there is a recklessness, with a majority of them, regarding any law conducive to their general health. There is a disposition in them to be irregular in their eating, taxing their digestion with the most trashy foods, committing imprudences of all kinds, such as exposure, irregular hours during the menstrual epoch, and paying but little attention to its presence. It is in the school girl of to-day that the field of gynecological prophylaxis has its widest scope of application. According to Engelmann, who has made a most careful study of this phase, from fifty to seventy-five per cent. of young college women, suffer in various degrees with their menstrual period and I dare say, if it were possible to obtain statistics on this point, from our leading local women's college, we would find at least sixty per cent of them sufferers at the time of their period. The period of puberty should claim the attention of the physician as a promising field for preventive gynecology. We have two classes of girls to deal with: those in a higher social strata, born in luxury, taking no exercise, early introduced into society and subject to late hours and an artificial life. The poor girl inherits a weak constitution in many instances, leads an unhygienic life, is poorly nourished and forced to tax her physical strength at all times. Many of the most distressing cases of young women are those of a nervous temperament, of quick intellect and ambitious in their studies. These young women excite the pride of their parents in their mental attainments, are permitted and urged on in their efforts, neglecting their physical side for that of the mind, and upon nearing the goal of graduation receive their diplomas with high honors, but with a wrecked constitution and periodical suffering from the menstrual molimen. Many of our young girls are nothing more or less than hot-house plants, leading an artificial life and soon laying the foundation of that of a confirmed neurasthenic. The point young women neglect in a great majority of instances is that of properly regulating their bowels, and fully 50 per cent. of them to-day have cultivated the habit of taking drugs to promote the expulsion of the bowel contents. What is the duty of the gynecologist in advising parents in reference to their daughters' health at a time at which they are laying the found-



ation for their future happiness and general welfare? When it is recognized of all married women who suffered actively from pain during the menstrual flow prior to their marriage, at least from 45 to 70 per cent. of them are sterile, a problem is presented worthy of the most serious consideration of all medical men. I believe that it is the duty of a physician to in every way possible direct the lives of young girls with especial reference to the normal establishment of their menstruation. The course of study pursued by these young women should be so regulated as not to permit the development of the mind at the expense of their physical side. There is a tendency in our colleges to crowd too many studies upon our young women without seeing that they properly exercise their bodies. Regular hours should be insisted upon and a certain amount of wholesome exercise indulged in daily. Wholesome and digestible food, with the elimination of trash, is indicated, and the avoidance of constipation should be an imperative point. I believe with Reed that there is a close sympathy between the development of the legs and that of the uterus, and therefore walking is a valuable agent in properly developing the pelvic organs of young women. At the time of the menstrual period, young women should not be forced to perform their usual college duties if there is any disposition towards pain during this period.

In cases where there is a tendency to develop pain at this period, it seems to me a wise policy to permit the girl to remain quietly at home until the flow has ceased. During vacation all of the latitude possible should be given, and a change of climate prescribed if in keeping with the means of the patient. In cases suffering owing to an undeveloped organ, golf, lawn tennis, mountain climbing, horse-back riding, etc., are valuable adjuncts towards the general end. Further than these hygienic measures, when the attention is turned to the treatment of the local condition, the maxim should be laid down that in our efforts to cure it should be our purpose to do as much good with as little harm as possible. In these cases of non-developed uterine bodies, we have the characteristic pin-hole os, which has been regarded for the longest as a strong indication for the much abused operation of curetting and dilatation. A point of value is that the cervical canals that prior to menstruation will not permit the introduction of the small probe will at the time of menstruation easily admit the introduction of a normal uterine sound. Many of



these cases are treated as one caused by a mechanical obstruction, a factor which to mind plays but a small part in the production of dysmenorrhœa. Our pioneers in gynecology, such as Emmett, Barnes, Sims and others laid great stress upon mechanical obstruction as a factor in the causation of dysmenorrhœa but in the light of our more recent experience, this view is no longer tenable. Hulbert, in 1000 autopsies, states that the stenosis of the os was rarely if ever encountered and was the least frequent of all deformities of the uterus. We are only too prone to operate on this class of cases, and as Dudley has aptly said, one half of us are engaged in severing the cervix and the other half in sewing it up. The value of dilatation and curetting this class of cases does not seem to me to be in correcting any mechanical obstruction, but its only virtue lies in acting as a stimulus secondarily awakening the nutrition of the part.

Howard Kelly states that a large proportion of his cases operated upon were not benefited, and many were worse after the operation than before, an honest statement, which if made by all gynecologists would point our similar experience. Not more than 5 per cent. of cases curetted and dilated without having any after-treatment are cured or benefited. The flow from the uterus emits so slowly and is expelled over so long a period of time and at the same time nature making a provision for its expulsion by a relaxation of the os, is a point strongly against mechanical obstruction playing a large role in dysmenorrhœa.

We want then in developing an undeveloped uterine body not only the placing of the girl in the best general health, but we want the direct stimulation of the endometrium and muscular structure of the organ by stimulating nerve filaments and conveying awakening impulses to the ganglia in the uterus adnexa. Electricity in this one place is superior, in my mind, to any other remedy, and though conscious of the fact that in its application much patience, care and persistency is to be exercised, I believe that our greatest hope lies in its proper use. The bi-polar electrode is the best to be used with these cases. Martin, of Chicago, has devised a very convenient and satisfactory instrument for the application of galvanism or faradism to the uterus. Time forbids the going into detail of the mode of application of this remedy. Suffice it to say that, with from two to three treatments a week of from five to ten minutes

duration, has proved in the hands of the most careful observers to give entirely satisfactory results. After the application of the electricity, a wool tampon is of service to keep the body supported. According to what pole is preferable will they be used. The positive pole acts, first, as a slight dilator, second, causes a contraction of the blood vessel, and third, acts as a sedative and imparts an electro-tonic effect.

By its well known tonic effect it increases nutrition, and by acting on the sensory nerves relieves neuralgic pains and improves the general tone of the pelvis. Martin, Palmer and others believe that the faradic current applied to these non-developed uterine bodies acts as a strong stimulus and is a medium through which a normal physiological exercise to the tissues can be obtained.

Pelvic massage is another means at our disposal to favor the development of the pelvic organ, and if properly applied will certainly cure many of these distressing cases, though aware of the fact that this measure is uncouth and objectionable from a moral sense on both the part of the patient and the doctor; still its value as a therapeutic agent cannot be denied. There are many cases of dysmenorrhoea existing in young women when first married, but after the indulgence of intercourse, which acts as a most powerful stimulus to the woman's entire economy, stimulating the mammary glands no less than that of the uterus, these women in time become greatly relieved of this most distressing symptom. Should pregnancy supervene, the condition will be most probably completely cured since pregnancy is one of nature's best methods of relieving this lingering symptom in young women suffering from an undeveloped uterus.

Hot vaginal irrigation, given in large quantities at a temperature from 115 to 120, is a powerful stimulus to the circulation of the pelvis and thereby affects its nutrition, stimulating the development of the organ. Constipation should be combatted vigorously for with its presence it is impossible to regulate the circulation of the pelvic organs.

Another very interesting cause of dysmenorrhoea is endometritis. Symptomatically there is little to differentiate it from, except the usual period of menstruation and except that there is usually a premenstrual pain appearing several days before the flow appears, and is more aggravated until the flow is established. A

large uterus is found upon examination, and the os instead of being narrow is rather soft and patulous, and a thick albuminous discharge comes from the os, as a rule, of a purulent character, Leucorrhœa is common in this class. The diagnosis of common endometritis is easily made, the endometritis extending probably to the deeper tissues of the uterus, secondarily producing metritis, thereby increasing the size and weight of the uterus.

The mechanism of menstruation is better understood than its cause. Leopold describes the uterine mucous membrane during menstruation as being greatly thickened, swollen, dark, brownish-red, and soft nearly to liquification, but perfectly intact and separated by sharply defined boundary lines from the paler muscular tissue of the uterus. The uterine glands are lengthened, and can be seen with the naked eye. In the superficial portion of the mucous membrane, which is well preserved, and only in certain spots lacks epithelium and subjacent glands, may be seen an immense and enormously hypertrophied capillary net work, the vessels of which have an irregular outline and lifts the uppermost layer of the mucous membrane. That portion of the endometrium, which lies between the surface epithelium, and underlying muscular tissue, which is not occupied with glands is filled by an interglandular tissue stroma of an embryonic type. Larger or small collections of the round cells between the inter-glandular cells are regarded as lymphoid tissue, and the endometrium is abundantly supplied with lymph spaces. This membrane is richly supplied with blood vessels, in which is imbedded many minute nerve filaments. When the uterus becomes engorged and congested, just prior to menstruation, naturally the endometrium becomes also congested, engorged and infiltrated, producing a contact with the opposite surface, which gives rise to pain. In such an endometrium, in which there is an infection of the utricular glands there is necessarily a secondary hypertrophied or hyperplastic condition of the stroma, or inter-glandular tissue, which being more of a fibrous character than normal will, when engorged with menstrual blood, produce pressure on the nerve filaments in the endometrium; and this causes great pain until after a complete establishment of the diapedesis. In treating this class there is nothing of

greater value than that of a thorough curetting of the membrane, followed with an application of carbolic acid, which will favor superficial slough of the old endometrium, the object being to promote the reformation of a healthy endometrium with the destruction of the infection. Many conservative gynecologists believe in the application of the galvanic current in this type of cases. Smith reports nine cases of a severe type relieved by this measure. The usual post-operative treatment following an operation for endometritis is to be insisted upon here. The use of hot vaginal irrigation, hot sitz bath, glycerine and ichthyol tampons to support the uterus in its normal position. At the same time the glycerine acting by its de-hydrating property will deplete the engorgement of the cervix, and favor the proper circulation in the pelvis.

Another variety of cases with which we are all familiar, and with whom many of us have battled faithfully to cure, many times failing, is that of the purely neurotic and neuralgic type, in which, as far as we can determine, after a most careful pelvic examination, nothing abnormal exists with the generative organs. The dual relationship existing between the generative organs, and the general health must be constantly kept in mind. Clinical evidence points strongly to the conclusion that the neurotic feature is the only one in many cases, and it is more or less manifested to some extent in all. Dysmenorrhoea is often a local expression of a constitutional tendency, or may be the stigma of degeneracy, and while the cause in a great majority of cases will be found in the pelvis, it is a point not to be forgotten that general and reflex causes play a most important part in its causation. It is looked upon by many as a local expression of a general neurotic state. We do not find many cases of the neurotic type in the lower social life, but it is most common in women of high social standing, who lead lives more or less artificial, are surrounded by conditions that favor a degeneration of the nerve poise, and in a majority of cases of a hysterical and neurasthenic type. When we remember that the nerve supply of the uterus comes from the second, third and fourth sacral nerves, and that there is a rich supply by the sympathetic system from branches of the aortic-plexus, and that the aortic-plexus is derived from the semi-lunar ganglia and renal plexus on each side, we realize



that the female genitals are connected by no remote strands with the cerebro spinal system, and the general abdominal viscera, and it is readily understood how impossible it is for any great disturbance of the nervous system to occur without causing some corresponding disturbance in the organs of the pelvis. It is a recognized fact that women are more susceptible to more forms of neuralgia than men, and that the intangible, imponderable and invincible pelvic pain, complained of by neurasthenics, is intensified during the menstrual epoch of all neurasthenics. In hysterical and neurasthenical subjects the uterus, though entirely normal, is hyperæsthetic, and with the muscular wave associated with menstruation, much pain is manifested. There are no more pitiful and trying class of cases than those we find in this type. None are more disappointing and taxing on the gynecologist than the neurasthenic with dysmenorrhœa. Here we find painful menstruation merely a local expression of a general neurotic state. The sympathy between the uterus and the nervous system is extremely close.

What are we to do with this type of sufferers? Where they usually begin menstruating normally, and as they advance in years, usually beginning at the age of 25 to 30, not having been successful to marry, their painful menstrual effort begins, gradually intensifying as they increase in years, and obtaining relief only after the arrival of old age or the menopause. Countless numbers of these women are curetted and dilated, and it is here that I want to go on record as appealing in behalf of these cases, and for a more thorough diagnosis and study of the condition and in condemnation of the loose and hurried surgical measures resorted to in their treatment. What is to be accomplished by curetting and dilating cases of this character? Certainly nothing, and I am convinced that it is a procedure to which we are all too prone to resort, without having any definite ideas in mind when it is performed. We are too anxious to operate, and depend entirely upon surgical treatment, and little or none upon measures other than surgical. When these cases come to us with their pitiful tales, the average busy gynecologist is not disposed to think of them in a serious and conscientious way, knowing what a most complex and tedious problem is presented for his consideration. In the treatment of these cases it is essential that we aim our

efforts towards restoring the equilibrium of the nerve system, the main feature of such treatment being rest, massage, hydrotherapy, change of surroundings, new climate, glycerophosphates, mental diversion, etc. We all know of cases in our practice in which women were known to suffer greatly with the menstrual period, when under some mental distress and grief, which upon being relieved, caused a normal restoration of this most important phenomena. I have seen women who during the winter months suffer intensely from their periods while they were leading an excitable and irregular life, but when going off to a quiet summer location, where they would gain rest and relaxation, be entirely relieved. The galvanic current applied with the positive pole on the interior of the uterus is claimed by many to act as an efficient sedative to the terrible neuralgic pain. In short, the treatment for these cases is the direction of your efforts mainly at the constitutional state, the dysmenorrhoea being simply the local expression of a general condition, in fact a treatment of all dysmenorrhoeas, resolves itself into an accurate diagnosis. I have brought these three types of dysmenorrhoea to your attention, believing that they are worthy of some interest, and in closing, I am thoroughly conscious of the fact that there are many other causes of dysmenorrhoea upon which I have not touched, but in discussing that which is purely a symptom, it is impossible to treat fully in a timed paper.

Before closing I cannot refrain from mentioning a mode of treatment first introduced by Fleiss in 1897, who claims to have discovered a close relationship to exist between the nasal mucous membrane and the female generative organs, stating that he has relieved 34 out of 47 cases by his treatment. Dr. Riess in a recent article, writes encouragingly of this method of treatment, and, with him, I believe it worthy of serious consideration. It is stated that the touching of certain areas along the nasal mucous membrane located on the inferior turbinated bone with a 20% cocaine solution, will relieve many cases of dysmenorrhoea, especially the neurotic type, but not those founded on a mechanical basis. He recommends the application of a 20% solution of cocaine to the genital spots on the inferior turbinated bone, and the side of the septum, which, if relieved by this solution, to afterwards be treated by electrolysis, which will yield permanent results.

The element of suggestion was thought to have played a prominent part in this treatment, but experiments by those who are skeptic find that such be not the case. I believe that it is worthy of consideration, all remedies of any character should be hailed with delight, hoping that they may prove of some substantial value. I have not touched upon membranous dysmenorrhœa, for it is a condition rarely met, but of which we know little of its pathology, and are comparatively helpless to relieve except by the introduction of an artificially induced menopause. Medically, all of us have our special remedies, and it is only here that I wish to condemn the reckless administration of morphine in cases of dysmenorrhœa. The surgical treatment of dysmenorrhœa has been slighted on this occasion, because it is felt that all gynecologists are thoroughly alive to its possibilities and where, as I am convinced that in many cases it is abused, still I do not wish to be understood as not being aware of many serious cases being cured through its medium. Wherever a local condition presents itself certainly it should be met surgically, if indicated. The average gynecologist's office in our midst is nothing more or less than a meeting place for its patients, where an examination is made with especially reference to the finding of some surgical condition, which if found, they are immediately sent to an institution for operation. It seems that we should in the treatment of these women whose lives are made miserable by this disordered phenomena, be more conscientious, and study their cases more in detail, so as to arrive at some positive diagnosis, and try to make their lives more bearable, and after once having determined upon the true cause, not be too anxious to resort to some quick and unreliable measure, when we know that by a more prolonged, taxing, and worrying procedure, better results will be obtained. These poor unfortunates deserve better treatment than they are receiving. We are told on many sides that gynecology is gradually being absorbed by the general surgeon, and is not destined to survive as a true specialty, but just so surely that we devote our best efforts on the consideration of gynecological phophylaxis, sterility, dysmenorrhœa, and a host of other similar disorders, are we just so surely destined to preserve our identity as specialists, and accomplish the greatest good.

## CONCLUSIONS.

1. Dysmenorrhoea is not a diagnosis, not more so than is jaundice, and should be looked upon as a local expression of a constitutional or pelvic disorder.

2. That dysmenorrhoea is seemingly on the increase and is developed in proportion to the strenuousness of the human existence.

3. The period of puberty should claim the attention of the physician as a promising field for preventive gynecology, as it is at this impressionable period that the foundation for future suffering is laid.

4. It is the duty of medical men to urge the necessity of properly caring for the physical side of the schoolgirl, not permitting the mental faculties to be trained at the expense of the physical side.

5. That while mindful of the great value of surgery in the treatment of certain well defined pathological conditions in the pelvis, still there is a growing tendency to abuse its application in reference to dysmenorrhoea, and that as a whole the results obtained through its intervention are nothing of which we can be proud.

6. A plea for a more careful study in analysis of these cases with especial reference to the etiological facts, and too with especial reference to the value of the application of the general hygienic laws, electricity, massage, exercise, etc., in contradistinction to the reckless and loose surgical measures resorted to in their treatment.

7. That dilation and curetting is of value in well defined cases but as a routine procedure is woefully abused.

8. That in the light of recent experience obstructive dysmenorrhoea is rare, and that the mechanical side of dysmenorrhoea is not looked upon as an etiological factor with the same degree of frequency now as in the past.

9. That there is a close dual relationship existing between the generative organs and the general health, and in the treatment of dysmenorrhoea, it should be constantly remembered.

10. That dysmenorrhoea offers a field for great work and thought; so it is the duty of our specialty to devote more study to just such problems, and by considering more exhaustively subjects of like character, there would be less talk of the possibility of the specialty being ultimately absorbed by the general surgeon.



## DISCUSSION.

DR. ISAAC IVAN LEMANN, of New Orleans: In the discussion of this subject there are two points to be noted, first, that dysmenorrhoea is in most or all instances, merely a symptom, and second, that in many other instances, dysmenorrhoea is founded upon some pathological condition not discoverable by us. It is curious to note that women whose pelvic organs, including the ovaries and tubes, are grossly diseased, may not suffer from dysmenorrhoea, and that women in whom we can find no pathological condition locally suffer most intensely. Whether that suffering be due to a true neurosis or to some condition far distant from the localization of the pain as suggested by Fliess and brought out by Emil Reiss, I do not know. I refer to the so-called genital spots in the nose at the anterior end of the inferior turbinate bones and on the septum opposite. Personally I have had no experience with this class of cases, but the testimony of rhinologists is sufficient to arouse our interest in the subject and encourage them and ourselves to further investigate the influence of these spots in the nose. The dysmenorrhoea so often found in virgins and women with undeveloped uteri, which disappears on marriage and at childbirth, can be explained by the undeveloped condition of their generative organs, and it is these conditions which can be relieved by measures directed to the development of the organs, such as galvanism and exercise.

DR. L. PERRILLIAT, of New Orleans: I believe the article dwelt principally on those cases of dysmenorrhoea due purely to a faulty development of the uterus going on at about the time of puberty. We know that the treatment of these cases is exceedingly difficult. The palliative treatment by means of emmenagogues and the application of iodine to the vault of the vagina is not only tedious but unsuited to those cases and very unsatisfactory, and on that account the surgical treatment is usually resorted to and gives the most satisfactory results. During my service at the gynecological clinic a great many cases came under observation. Last winter we had many cases of women who had been married and were never pregnant. We tried the method of the outer bridge pessary with the idea of rendering dilatation permanent. The pain is due to a spasmodic contraction of the internal sphincter of the os and the principle of the outer bridge pessary is that the dilatation is rendered permanent by leaving the instrument in place. Some of the cases

in which we used this pessary were those of sterility, and the os was rendered patulous, facilitating the passage of the spermatozoa into the uterine cavity. In all of these cases they menstruated without pain, and one patient said that it was the first time she had been without pain. So far as I am able to tell the relief has been very great. Anesthesia is required for the first introduction, but as a rule it can be introduced the second and third time without chloroform.

DR. E. H. WALET, of New Orleans: I want to relate my experience with the outer bridge pessary. I believe there are cases very amenable to that form of treatment, some cases being purely obstructive in their nature, and if dilatation and curettage be followed by the insertion of the outer bridge drain my experience is that it serves the purpose better than any other appliance. I have treated perhaps half a dozen cases by this method, and in every one of them the dysmenorrhoea has been relieved and in two instances conception followed, and of course that condition corrected the dysmenorrhoea. In another case, under observation now, there has been temporary relief. The patient had suffered for two years and has menstruated three times since the application and painlessly, showing that when properly applied, and removed from time to time to prevent irritation, it is an appliance of great value.

DR. O. JOACHIM, of New Orleans: Since the remarkable publication of Fliess I have given this subject some attention, and when clinical history justified it, have made some observations. The result thereof does not, in my experience, permit excessive hope of relief for dysmenorrhoea by treatment of hypersensitive areas in the nose. I can recall four or five cases which have received benefit. The method of procedure I have adopted is to order for the patient a 2% cocain solution to be used very sparingly at intervals of 5 minutes, as a spray for the nose, when dysmenorrheal pain occurs before, during or after the establishment of the flow. If relief is thereby given local treatment has been advised; if not, I saw no adequate reason for advising it. This interesting feature of dysmenorrhoea needs further observation and attention.

DR. A. C. LANDAUER, of New Orleans: In dysmenorrhoea the tincture of iodine by the kataphoretic method especially has given very good results, as dysmenorrhoea is caused by endometritis, and if we cure endometritis we cure the dysmenorrhoea.

DR. C. JEFF MILLER, of New Orleans: I believe the present indefinite methods advised in the treatment of dysmenorrhoea have arisen from the failure to study the condition solely from the standpoint of a symptom. In no other condition is an exact diagnosis so essential to success as in this. We have numerous remedies that promptly relieve the symptom under discussion, but it is only prevention and permanent results that count for anything. Dysmenorrhoea has been classified by many authorities, under numerous heads, but it is a condition hardly disposed of in such a dogmatic way. It admits of few classifications and should be studied in the same manner that pain in the abdomen is considered in abdominal disease. We know that it frequently follows anemia and is relieved by constitutional treatment; that it is a constant symptom in faulty development of the uterus, or appendages; of chronic inflammation; and again is a warning in another class of cases that nature is attempting to establish an early menopause by atrophic changes which originated in an earlier infection. It is most important to recognize this variety, for not only is the prognosis unfavorable, but divulsion and curettage is frequently followed by an outbreak of pelvic peritonitis which may render her condition more distressing, or even end in death. The time is coming when the surgeon will attempt to do more for certain classes of dysmenorrhoea. At present many fold their hands after divulsion and curettage and a few applications are made, wait another six months and repeat the treatment. Dysmenorrhoea is to be studied as sterility is being studied, and in the future the abdomen will be opened more frequently to clear up some obscure forms that now appear hopeless. There is a form of dysmenorrhoea occurring in young girls or nullipara in whom the pain of menstruation disappears after the first pregnancy. Probably more cases belong in this class than under any other head, and they seldom present any definite disease of any organ. Theilhaber and Menge have presented valuable suggestions on this subject as well as Schultze, who recently explained the pain by the failure of the muscular layers of the uterus to fully develop until the age of twenty years is reached. At the beginning of menstruation connective tissue is more in evidence, especially in the outer layers, and the lack of muscular power is the cause of the premenstrual pain, or "capsule stretching pain." In this class of cases, when other measures fail, Schultze suggests

division of the muscular layers of the uterus from without inward, on the supposition that division of the outer undeveloped musculature will relieve the capsule stretching pain. This could be done through an anterior or posterior colpotomy, and since it is not a dangerous operation it is a point worth considering in some of the severe cases where other measures fail. It would also permit an examination of the appendages at the same time to clear up obscure lesions, such as undeveloped organs, adhesions, cystic disease of ovaries, and if necessary, the correction of displacements. Probably fifty per cent of the cases of dysmenorrhoea, especially those of early life, are dependant upon constitutional derangements, anemia, etc., and can be relieved by correcting faulty digestion and regulating the mode of living of the patient.

DR. CLARK, in closing: I have not heard the speakers bring out anything prominently which was not covered in the paper. I feel grateful that the paper was discussed so freely, and I believe it is a subject that we can think upon for some time to come, and I am in hope that these poor suffering women will receive better treatment than we are at present giving them.

### **Report and Exhibition of Cases of Cancer Treated by Mercuric Cataphoresis.**

By AMEDEE GRANGER, M. D., New Orleans.

I will precede the reading of the histories of my cases by a brief exposition of the method employed in their treatment, hoping thereby to make them more comprehensive and interesting. Mercuric cataphoresis was first used by Dr. G. Betton Massey, of Philadelphia, in 1893, and his *modus operandi* and results were published in numerous medical journal articles dating as far back as March, 1895. By it is meant the cataphoric diffusion into the growth of the products of electrolysis. The instruments used, called electrodes, are made of zinc of various sizes and shapes to suit the part affected and are coated with mercury. By the electrolytic action of the current, the body fluids in the affected parts are decomposed, the acid ions going to the positive pole and the basic ions to the negative pole. The positive pole is the active pole, there the acid ions attack the amalgamated zinc electrode, forming oxychlorides of zinc and mercury, which are highly astringent and germicidal salts. These nascent salts are driven by the cataphoric



property of the current away from the electrodes, passing to the interior and to all sides along the most cellular paths, that is, those containing the colonies of cancer cells. In their passage, they unite with the albumen of the cells to form dead albuminates. Dr. Wyeth has used and recommends the injection of boiling water into malignant growths to effect their destruction. Mercuric cataphoresis does more than that. Far beyond the zone of destruction, which should extend to the apparent limits of the growth, there forms in a few days a puffy, reddened zone of sterilization, in which the diffused chemicals have been deposited in sufficient strength to destroy the cancer cells but not the healthy tissue. These are only slightly irritated.

What reasons have we to believe that the cataphoric products have such selective action on the malignant cells? Theoretically it should be so, first, because the cancerous cells, being embryonal in formation, are more cellular and therefore become paths of least resistance, through which the electric currents, carrying the nascent mercury salts, flow, because it is a law in electro-physics that currents seek the path of least resistance; second, the cancer cells, being embryonal and lowly organized cells, succumb more readily to the action of the diffused chemicals than the healthy cells. Clinically, Dr. Massey has often made the observation which I have also made in nearly all of my cases, that the zone of sterilization shades off irregularly into the surrounding unaffected tissues, showing a difference of conductability. The reason for this difference is hard to explain in tissues of identical structure, unless we admit that certain portions have had their conductability increased by deposits of yet undeveloped cancer colonies.

The three patients whose history I will now read have not been selected, but are my first three cases. Later cases are much too recent and I reserve them for a later paper.

The first patient had an epithelioma of the lower eyelid. This she first noticed about four years before consulting me. During the interval she was under the treatment of several physicians, amongst the number two of our best ophthalmic surgeons, and all diagnosed the case as epithelioma of the lid. The ulcer grew larger in spite of the various treatments employed, it bled easily and often without apparent cause. Pain was present, more or less, throughout the progress of the case, becoming almost constant

during the latter part, forcing her to abandon her sewing. The lid was tight and drawn and the movements of both the eye and lid were difficult and painful. The photograph (Fig. I A), taken at the beginning of the treatment, shows her condition at that time. Notice that the growth involves the inner four-fifths of the lower eyelid of the right side; it is ulcerated in the centre and swollen and unhealthy looking at both extremities. The inner canthus and upper extremity of the lachrymal sac are affected. The treatment consisted in three minor mercuric cataphoric applications under local anesthesia. The last one was made October 3rd. The unhealthy tissues shown in the picture were completely eradicated, leaving a clean healthy excavation, after the small sloughs dropped out on October 11th. This filled up with healthy granulation with astonishing rapidity, as the second photograph (Fig I B) shows. Notice the general healthy appearance of the wound, and especially of the inner canthus, which, with the exception of the small elevated spot on the nasal side, looks as healthy as the sound lid. The small lump seen in the picture increased slightly in size and a small sinus formed. I made an application to the sinus for a few minutes, with the result that the sinus healed and the little mass completely disappeared. The third photograph (Fig. I C) was taken last week especially for this paper and shows the lid healed with practically no deformity. The movement of both the eye and lid is free and painless, and I believe that the same results could not have been obtained by any other method without a secondary plastic operation.

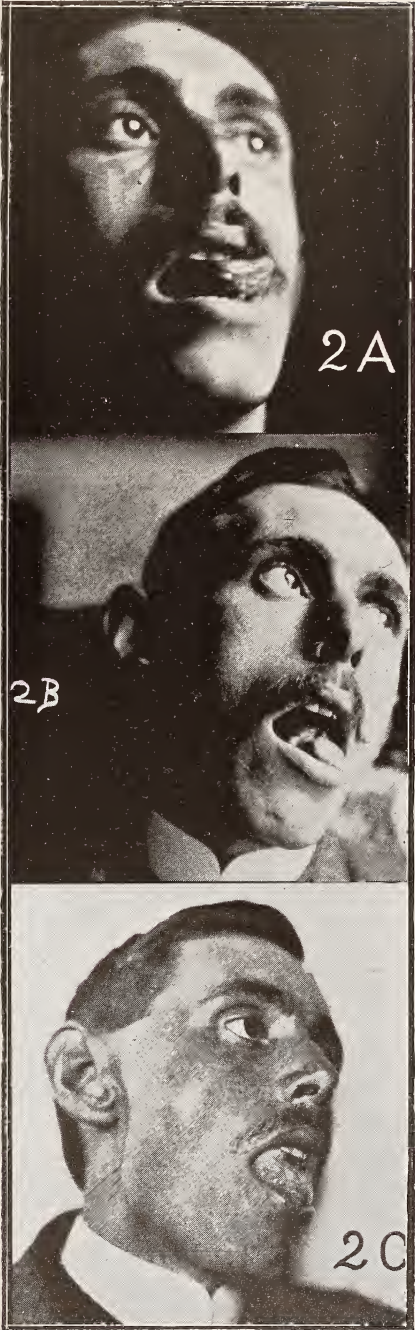
The second patient was referred by Dr. Sauter, of this city, for the treatment of an epithelioma of the tongue. Five years ago this patient noticed a small ulcerated nodule, size of a pea, which resisted the ordinary treatments, and had been caused by a jagged and projecting tooth which had wounded his tongue on many previous occasions. The ulcer increased slowly in size, becoming painful and swollen every few weeks, then it would bleed freely for several days, and when the hemorrhage was checked, the swelling would disappear. About last October he visited the surgical clinic at the Charity Hospital. There a diagnosis of epithelioma was made and ligation of the external carotid advised. A small portion of the growth was also excised for microscopical examination. The result of the finding was never ascertained by the patient, but the disease



Dr. Granger's Case, I.







Dr. Granger's Case. II.

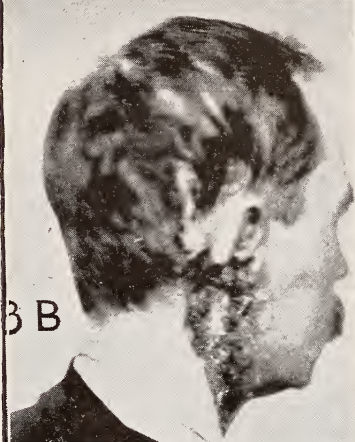


progressed much more rapidly after the small section had been excised. When I first saw him (Fig. II A) there was a hard, nodular growth, size of a hazelnut, on the right side of the tongue, about one inch from the tip. The nodules could be easily palpated through the dorsum of the tongue also. It was only slightly ulcerated. January 29th, 1904, with the assistance of Drs. Sauter and Dabney, I made a major application of mercuric cataphoresis, under general anesthesia. The duration of the application was one hour and fifteen minutes, and the strength of the current averaged 150 milli-amperes. This caused a complete destruction of the growth. The line of demarcation began to form about the fifth day, and the necrosed tissue came away on February 8th, the tenth day after the application. The photograph (Fig. II B) shows the wound left in the tongue after the slough came away. The patient was kept under observation, but no other treatment was deemed necessary. Last week I took the third photograph (Fig. II C). If you examine this closely you will see a slight, almost imperceptible, groove on the right side of the tongue a short distance behind the tip, this is the site of the large hole seen in picture (Fig. II B). The white space seen on the right between the tongue and the roof of the mouth is part of a piece of cotton which was placed in the mouth to assist in taking the photograph.

The third patient, a case of inoperable recurrent carcinoma of the right side of the neck, was referred by Dr. A. C. King. His condition at that time is seen in photograph (Fig. III A). The lower part of the right ear is diseased, behind and below the ear is seen a large, ugly ulcer lying over the course of the large vessels of the neck, and below this a mass the size of an egg, which is rapidly breaking down, the lower border of that mass being about one inch above the clavicle. The discharge from the ulcer had a characteristic foul odor of malignant growth. The disease is supposed to have originated some nine years ago from a mole situated behind and below the right ear and which was wounded while shaving. A small ulcer with indurated base and borders, the whole about the size of a bean, resulted. In December, 1901, it was as large as a goose egg and on the fifteenth of the same month the growth was cut out under general anesthesia. Two months later recurrence became evident in the scar, necessitating a second cutting operation, May 19th, 1902, followed again by re-

currence six weeks later. The X-rays were then used from June, 1902, to July, 1903. The patient's skin reacted violently and on three or four occasions the treatment had to be discontinued for from three to four weeks on account of severe X-ray dermatitis. From June, 1903, to February, 1904, he was given an average of three X-ray exposures weekly. Twice also during that time a lump was excised from below the ear; once under local anesthesia and once under general anesthesia. Dr. King made the observation that the ulceration began to spread immediately an X-ray burn was healed and the treatment discontinued. The rays seemed to have kept the disease in check until within the last month, when it began to make rapid progress in spite of continued exposures. February 15th, 1904, I made the first major cataphoresis application, under general anesthesia. At the end of one hour I had to discontinue the application because the small carbon controller which I was using could not withstand the heavy current any longer. The current strength varied between 100 and 200 milli-amperes. The second application was made February 24th, 1904. This time the current was between 200 and 350 milli-amperes, and the duration two hours and fifteen minutes. The destruction seemed complete, with the exception of a small portion near the external auditory meatus, and the central part of the ulcer which I did not want to treat too radically lest we should have secondary hemorrhage in the event that the vessel walls became involved in the necrosed area. A fact noticed by my assistants and by the nurses present was the complete disappearance during the treatment, of the foul odor which emanated from the sore. After the necrosed area had come away, and healing was well advanced, the diseased parts referred to above became more apparent, and on the 30th of March, 1904, I made a third major application. This lasted one hour and fifteen minutes with a current strength between 150 and 300 milli-amperes. I succeeded, this time, in destroying all diseased tissues. At the time of this application, the change in the general appearance of the patient was very great and his cachectic facies had disappeared. The photograph (Fig. III B) taken about three weeks after the third and last application, shows the large granulating surface, extending from the external auditory meatus to within about a half inch of the clavicle. The process of healing, especially in the lower end of the wound, is well advanced, and to give you an idea of the





Dr. Granger's Case. III.



rapidity with which this reparative process goes on I took a third photograph (Fig III C) only two weeks later than photograph (Fig III B), and you can readily see and appreciate the change brought about in this short interval. The lower portion of the wound is healed and the upper portion is healing rapidly. The change in general appearance has been even more striking, the cachectic look is gone, and he has gained several pounds in weight, although no tonics were administered. This last result was brought about by the alterative and tonic action of the mercury absorbed.

A careful study of these cases teaches the following instructive and interesting facts, viz:

1st. That we possess in mercury cataphoresis a valuable means by which we can safely, not only destroy a malignant growth, but also sterilize the apparently unaffected tissues surrounding it.

2nd. That the foul odor, usually present in these conditions, disappears during the application, as soon as the mercury salts become diffused throughout the affected parts.

3rd. The normal healthy tissues surrounding the disease seem to be stimulated to increased physiological activity, as evidenced by the rapidity with which the healing process is carried on.

4th. Although pytalism was absent, enough mercury was absorbed into the system to produce the marked toning and alterative effects, shown by the improvement in the general condition.

#### DISCUSSION.

DR. J. BIRNEY GUTHRIE, of New Orleans: I congratulate the author on his application of this method for the destruction of malignant growths. It is attracting considerable attention, although there is nothing essentially new in it as it has been known for years. I do not believe that there is any antiseptic property that can be imparted to the normal tissues surrounding a malignant growth of sufficient strength to destroy the micro-organism which would not destroy the tissue cells themselves. The three cases are of extreme interest and the result of the treatment in the case of epithelioma of the tongue is better than any I have seen by any other method. I have seen the carotid ligated and have done it myself and treated such cases with the X-ray and with absolute failure in every case. I have never seen a case of true epithelioma of the tongue recover, but this case seems to me to be absolutely well so far as a superficial examination can determine and articu-

lation as well as the cosmetic result is fine. The case of malignant growth back of the ear seems to me to be still in a very malignant condition. It is still a carcinomatous ulcer and I did not gather from the Doctor's discussion whether or not he believed it would go on to recovery or whether it would be kept under treatment. I have had quite a series of cases of epithelioma of the eyelid which I treated with the X-ray and with uniformly good results. It seems to me that the cases of epithelioma of the eye lid treated with the X-ray have a little more mobility than the case presented by Dr. Granger, but that epithelioma can be treated by any other method than X-rays and get so good a result as is shown here is certainly a matter of great interest. Caustic pastes of course are out of the question but this is a much more surgical procedure than the application of caustics. Caustics do more harm in malignant growths of the face than they do good. I have taken the liberty of bringing down a case which is now under treatment for extensive epithelioma. In conjunction with Dr. Dyer the case has been under treatment since November 25th. The patient is a man of 27 years, history good as far as syphilitic disease is concerned and absolutely negative as to previous hereditary predisposition.

Fifteen years ago an ulcer appeared which extended until it involved the upper and lower eyelids and then the forehead. When I first saw him there was an epitheliomatous ulcer covering an area on the forehead and another involving both cheeks and the nose, and another between brows about the size of a dollar. The deformity was very great and showed the *beautiful* results of caustics about the face. As a last resort he submitted to the X-ray treatment. The most remarkable response to X-ray treatment I have ever seen was in the ulcer on the forehead for in ten days after the applications were begun the ulcer was healed. One whole side of the face was epitheliomatous. In my experience the involvement of the mucous cavities constitute the most difficult sections to treat with the X-ray. This patient has had 24 treatments and is very sensitive to the X-ray. Whether or not to venture to do any plastic work is a question that I would like to have the opinion of the members upon. I want to call attention particularly to the softness of the scar on the face. There is absolutely no method which would give so soft and pliable skin as this patient has where the epithelioma has healed.



DR. H. D. BRUNS, of New Orleans: I would like to add my testimony in the case shown by Dr. Granger. I saw this patient and was one of those who treated her. At that time we were trying in my clinic the continuous application of ice and I tested the method on her but the application was without any effect whatever. As to the epithelioma of the lower lid, I have had experience with such cases and I believe there is no place where surgery does worse work than it does in epithelioma of the lower lid. Only those who have done these plastic operations and seen their work a long time afterwards know how very, very poor is the result. Nothing is easier than to get an immediate good, but if you see the case long afterwards, or somebody else's case, as is usually the way, you marvel how the beautiful result has disappeared. The less experience a man has in that line and the more experience he has in general surgery the worse the result usually is. Again, where the mucous membrane and the skin join is a point peculiarly liable to epitheliomatous change and in order to be rid of the infection, even for a small growth, you have to make an immense sacrifice of tissue. So it was with the greatest pleasure that I found myself able, after seeing one or two results and reading the literature, to refer these cases to my confreres who did X-ray work. The result, so far as my experience has gone, is perfect. The cases are not old enough, in my opinion, to establish that the growth is gone for good and ever but there is every cause to think so; and it has disappeared with a lack of scar tissue that is truly wonderful. In the case shown to-night the growth is thoroughly eradicated, but in a part like the eyelid the loss of tissue is a very grave matter; there is no room for loss and we do not want any sloughing. The ideal result is without any sloughing to have a flexible scar left and that is exactly what the X-ray does. This case however, was a severe test as the disease had infiltrated and affected a large part of the lid, therefore there was bound to be considerable loss of tissue; but comparing the amount of tissue lost and the flexibility of the scar, the result does not seem to be quite as good as that produced by the X-ray treatment.

DR. A. G. FRIEDRICHS, New Orleans: The loss of tissue is easily enough remedied, for as soon as the patient is well, a mechanical apparatus can be made that will cover the whole of the lost tissue, restoring the contour of the face and relieving his de-

formity. So we do not have to resort to plastic surgery to restore the tissue.

DR. WM. M. PERKINS, of New Orleans: I want to congratulate the doctor on the result obtained. I had a case almost exactly similar of ulcer treated for a long time by X-rays at the hospital and when I got through the result was absolutely perfect except at the outer and inner canthus when the patient got tired and left.

In regard to Dr. Guthrie's patient I had an opportunity of seeing this case in the early stage and I thought the doctor was only treating the man to console him and I looked upon it as absolutely hopeless. It is undoubtedly the most remarkable result that I have ever seen in any case. You can form no idea of the extent of the disease.

DR. GRANGER, in closing: In regard to Dr. Guthrie's remarks, I did not say that the chemicals or chlorides of zinc and mercury had a sedative action on the cancer cells and would destroy these and not the healthy tissue, but said that the electric current had such selected action, passing through the path of least resistance in the most cellular path and as the flowing current is laden with the chemicals, these act where the current flows. Of the cases exhibited to-night two are considered clinically cured; the other patient is still under treatment and from its look to-night I fear that I shall have to make another application; it will be safer now, for the reason that at the time the other applications were made the ulcer was very deep, its bottom lying directly over the course of the carotids and the tissues above and below so diseased that had hemorrhage occurred there would have been no room for ligating, but to-day ligation could be performed with safety. The cosmetic result in Dr. Guthrie's case is probably better than could have been obtained with mercuric cataphoresis, but I am not prepared to say positively, as the experience in such cases is very limited. On the other hand, in deep seated growths, and especially in malignant growths within cavities, mercuric cataphoresis gives far better results than X-rays. This is obvious when we consider that we can transmit the cataphoring products to the site of application by means of a conductor of comparatively small calibre, so insulated as to absolutely protect the outer healthy parts of the canal, and yet capable of definite and controllable diffusion from the point of the conductor uncovered by insulation. While with the X-rays it

becomes necessary to cut off all but a few of the rays in their passage through the speculum and it is almost impossible to deflect these few effective rays so as to reach the whole of the diseased tissues.

---

## Society Proceedings.

---

### Orleans Parish Medical Society

---

MEETING OF JUNE 11, 1904.

DR. MAGRUDER, President, in the Chair.

DR. ROY M. VAN WART read a paper entitled:

#### "Arthritis Deformans."

The disease known in this country as arthritis deformans has in recent years attracted considerable attention and it is the purpose of this paper to bring forward some of the more recently established facts relating to it.

The question of the classification of chronic joint inflammations is intimately associated with this affection. The types occurring during the course of nervous affections, tabes dorsalis, syringomyelia, myelitis, hemiplegia, etc., are well recognized.

The group due to chronic bacterial infections, such as the gonococcus and the various pyogenic organisms form another well recognized group.

Apart from these there still remains another group, whether due to one cause or a variety of causes it is as yet not possible to state, and which is known in this country as arthritis deformans and in England as rheumatoid arthritis.

There are two chief theories of the nature of this condition: (1) That it is due to some nervous lesion, and (2) that it is a chronic infection. There is still a third view that the condition is not an entity, but a group of conditions due to various causes, which will be separated as our knowledge advances. The nervous theory suggested by J. K. Mitchell in 1837 has been from time to time revived, but except for one observation by Mott lacks definite proof. Mott observed the disappearance of a certain group of cells in the anterior bone of the spinal cord in cases of progressive muscular

atrophy which were complicated by this affection. This group was not affected in the uncomplicated cases. Careful examination of the central nervous system is still wanting, with the exception of a case studied by Triboulet and Thomas, in which there was degeneration in the posterior column of the cord.

Autopsies on cases in the early stages of this disease are rare and the observation of Hale White is interesting. A chronic inflammation of the synovial membrane with slight pitting of the cartilages was found. There were no bony or cartilaginous growths. A diplococcus was obtained from the joint lesions.

The lesions in the joints in long standing cases are fibrillation, splitting and pitting of the cartilages, which may later become completely eroded, leaving a polished bone surface. Thickening of the periarticular structures and the formation of cartilaginous or bony growths surrounding the edges of the bones forming the joint is usually found. In some cases atrophy of the heads of the bones may occur, giving rise to deformity.

The statistics vary as to the frequency in males and females. In Stewart's 40 cases, 20 were females; in Garrod's 500, 411 were in women. In McCrae's 110 cases, they were equally divided. The condition may occur at any age, the youngest on record being a case of Moncorvo's at 2 months. The youngest in McCrae's series was two years; the oldest 83.

Heredity has been noted in a small proportion of cases. McCrae calls attention to the difficulty in judging its nature from the description of a joint trouble.

Exposure to cold, wet and damp, bad hygiene, puberty, pregnancy, worry, care and local injuries have all been assigned as causes. Cases of joint trouble resembling this have also been reported as occurring with chronic suppuration.

Duer states that in India, where the native population is exposed to bad hygiene and to damp, the disease is rare.

The classification of the form of arthritis deformans given by McCrae is as follows:

1. Heberden's nodes.
2. General progressive form.
3. The partial or monoarticular form.
4. Spondylitis deformans.
5. Still's disease.

The first form was described by Heberden in 1803. It consists in the gradual development of little hard knobs at the sides of the



distal phalanges. In the early stages the joints may be swollen and red. This is especially true if they are injured. This form rarely tends to the involvement of the large joints. This was noted, however, in some of McCrae's cases. Merrins (*N. Y. Med. Journ.*, Feb. 14, 1903), disputes the relationship of Heberden's nodes to arthritis deformans, and thinks that they may occur in other conditions and are of no pathologic significance with arthritis deformans.

The general progressive form presents two great groups of cases, the acute and the chronic. There are many cases which fall between these two groups and others which it is difficult to classify.

The acute form commences with pain in the affected joint or joints, followed by swelling, with early redness. This is accompanied by some fever and disturbance of the general health. One large joint may be involved first and later the same joint on the opposite side or both may be involved together. In other cases one joint may be involved in one attack and the opposite one in another. The joint is swollen and in many instances red. There is great pain on movement and there may be pain on pressure. The swelling may be limited to one or more of the bursæ surrounding the joint. There is usually temperature and more or less constitutional disturbance. The attack, however, instead of subsiding or being relieved by treatment, tends to become chronic with now and then acute exacerbations. Aspiration of the joint yields little information.

The chronic form tends to involve the same joints. The outset is slow and insidious. A large joint or one of the smaller joints in the hand or foot. There is an occasional pain lasting for a day or two and then passing away. This is followed by a more or less gradual fusiform swelling of the joint which may or may not be red. The muscles tend to atrophy and more or less fixation of the joint gradually appears. Examination shows the conditions described and the presence of crepitus.

The partial or monarticular form occurs most frequently in the hip, spinal column, shoulder or elbow. It may be followed by involvement of other joints. Injury seems to be a factor in its production. Males are more affected than females. Anatomically it resembles the other forms of the disease.

The vertebral form has been described by many authors as a sepa-

rate disease, but there now seems to be little doubt that it is only a part of this process. The condition has been described under many different names. Marie who first described it, gave it the name *spondylose rhizomélique*. Von Bechterews called it "rigidity of the spine."

The anatomical basis seems to be a progressive ankylosis of the vertebrae, accompanied by pain and symptoms of pressure on the nerve roots. It may involve any portion of the spine as it may be limited to one or more parts. It is more common in males than in females. The deformity may be slight or extreme. Certain cases in the early stages may show unilateral rigidity due to thickening of the ligaments on one side only. This is often beautifully shown in X-ray photographs. The clinical features are pain usually at first localized to some part of the back. A careful examination will probably reveal some slight limitation of motion, with possibly some tenderness. An X-ray will show the line thickening along the spinal canal at the border of the vertebrae or involving the articular processes. Later deformity may result. Pain along the distribution of certain nerve roots may occur with muscular atrophy.

Arthritis deformans in children has been noted by many observers. It may assume any type described. Especial interest attaches to the form of the disease described by Still and known by his name. This consists in swelling in the joints of the type seen in arthritis deformans, accompanied by enlargement of the spleen and lymph glands. The large joints are commonly involved. They are swollen and painful and show atrophy of the muscles moving them. Whitman noted that the joints contained a pulpy material. Still noted that the joints showed only a chronic inflammation, with little fibulation and pitting. The disease is progressive and treatment has been of little avail. Edsall thinks it a form of chronic tuberculosis but this is not the accepted view and is contrary to the findings of Still.

The diagnosis in advanced cases presents little difficulty.

In early cases a careful examination will usually reveal in addition to the pain and swelling crepitus, which reveals the nature of the process.

In acute cases care in studying the exact condition of the joints will prevent error.

In acute articular rheumatism the process is in the joint and

confined to it while in arthritis deformans the periarticular structures are involved. The tendency to spread rapidly from joint to joint, the presence of acid sweats and the tendency to cardiac involvement still further serves to differentiate the two conditions.

Gonorrhœal rheumatism is usually more articular and the presence of a specific urethritis or other lesion serves to render the diagnosis certain.

Spender enumerates 8 different methods of onset and adds that they may be multiplied indefinitely.

Radiographs often serve to establish a diagnosis, particularly in the rarely spinal cases. Tuberculin will exclude the possibility of tuberculosis.

Before considering the treatment various special features of the disease require mention.

The deformity which is so characteristic of the disease may be due to the three different causes. The most distressing is that due to the bony and cartilaginous masses which surround and lock the joints. It may arise from particular fibrous thickening and thirdly from muscular contraction. The fingers may be bent in various directions, but there is most constantly present a deflection of the phalanges to the ulnar side. The deformity of the spine may be extreme, the back being bent in several curves. Kyphosis is perhaps the commonest.

Muscular atrophy is an important feature of the disease, and has been ascribed to three different causes. It may be due to changes in the anterior horn cells. This was shown to be true in the cases of Mott mentioned above. It has been ascribed to a neuritis. This has been shown experimentally to be true by Pighini. Finally it has been thought to be an atrophy of disease. It is an important feature of the disease and one rarely absent.

Jones has made some interesting observations in connection with the nervous phenomena. He has shown that the reflexes are increased on the diseased side in unilateral cases. The superficial reflexes are variable. There may be an ankle clonus and a Babin-ski sign. The sensation of pain on the sole of the foot was found to be increased, while common sensation was diminished. He noted Chvostek's symptoms in a number of cases.

The same writer has also noted a connection with Grave's disease. He found the two in twenty cases. Stocker has also noted the same

combination and found they were greatly benefited by thyroid extract.

Jones calls attention to the reduction in myotatic irritability, which he regards as favorable to complete recovery, where the fusiform swelling prevails. He also calls attention to the prevalence of flatfoot. This has been frequently noted by others.

Incontinence of urine and feces has been observed.

Kast, in studying the relation to cardiac disease from the pathological records of Prague, found that the acute cases were more liable to die of cardiac disease, while the chronic usually succumbed to tuberculosis, chronic nephritis or endarteritis deformans.

Spender has called attention to the increase in the rapidity of the pulse, over 90 in a large proportion of cases. This has been corroborated by McCrae.

Examinations of the urine have not yielded any results.

The skin lesions to which Spender has paid particular attention are interesting. He noted the presence of a brownish pigmentation either appearing as freckles or as brownish irregular masses. In some cases it even approached xanthoma in type.

The treatment of arthritis deformans is in many cases unsatisfactory, no apparent benefit resulting from any means employed. In other cases the disease seems to be arrested and in a few a complete cure has been the result.

Garrod, in considering the treatment, says that it must be commenced early, the patient's strength maintained and be continued for a sufficient length of time for months, or even years.

Before considering the treatment in detail attention should be called to the fact that as the disorganization of the joint proceeds the pain and the bursal swelling disappear and the joint becomes reduced in size.

The methods may be considered in outline as follows:

(I). Diet and hygiene. The subject of diet is perhaps the most important. Meat is cut off and other things gradually reduced under the impression that the joint trouble may be gout or have some relation to gout. Alcohol is usually prohibited. The patient under such a regime gradually loses ground and one is surprised at the progress of the disease. Contrary to this the patient should be allowed to have almost anything he wishes, attention being paid to seeing that



sufficient nutritious food is taken. Light wines and beer with meals, seem to be of benefit. The clothing should be suitable to the climate and preferably of wool.

(II). Climatic treatment. If a change of climate is advocated it should be preferably warm and dry. The soil should be dry and the temperature as equable as possible. Certain patients enjoy comparative comfort when in high altitudes who suffer extremely when near the seacoast.

(III). Hydrotherapy. Hydrotherapy benefits many cases. This may be given preferably at one of the various resorts where the patient enjoys rigid hygienic conditions at the same time, or they may be carried out in a modified way at home. In general they should not be too hot, too prolonged or too frequently repeated. The composition of the mineral waters at these resorts plays perhaps little part in the results obtained. Anemia, however, is often benefited by drinking the waters of one of the iron springs.

Vapor baths, either local or general, are often of great benefit.

The hot foot bath and wrapping the joints in hot sand relieve the pain in certain cases. Good results have been claimed for hot air baths.

(IV). Electricity. Electricity often relieves the pain and may perhaps play some part in arresting the disease. It may be given either direct, as galvanic, or faradic electricity, or in the form of the local or general electric bath, as employed by Lewis Jones. He recommends that the current from an alternating dynamo or induction coil be used.

(V.) Drugs. Many drugs have been recommended, but while they seem to do little good in many cases, they deserve a trial. Of these the most important are iron, arsenic and iodine in some form. The salicylates and their various derivatives and preparations do little good. Syrup of the iodide of iron has been especially commended.

Counter irritation in some form, preferably the Paquelin cautery, is often of benefit, particularly in the spinal cases. Blisters and other means may be used. Hyosciamus has been used by Garrod to lessen the spasm of the muscles. Cod liver oil is often of great value. Massage should be used in every case to prevent muscular atrophy and deformity from muscular contraction. Rest to the

affected joints is often of great value. The surgical aspects will be considered in a separate paper.

#### DISCUSSION.

DR. WEIS said that with regard to the etiology of arthritis deformans the concensus of opinion served to tend toward infection. Such being the case, the pathological lesions found in the spinal cord can be well explained as the result of a toxemia, and not a primary factor with the joint lesions resulting. Goldthwait (of Boston) has well differentiated two distinct types of arthritis deformans, with special reference to the vertebra—the osteoarthritic and the rheumatoid. In the osteoarthritic condition, the X-ray shows spicules of bone extending from one vertebra to another. The true pathological lesion is that of an osteitis, with disappearance of the inter-vertebral discs. Here, the treatment is absolute rest, while in the rheumatoid joint the treatment on the contrary is motion to obviate stiffness. The rheumatoid joint usually, if not always, contains fluid, and above and below the joints there is a periarticular thickening, best seen in the fingers and knees. The differential diagnosis is of the greatest importance. In the early stages of an arthritis deformans, *i. e.*, the acute, the attack is unquestionably often mistaken for an acute rheumatism. The pulse is low in arthritis deformans, the individual joint does not get well. The original joint at the onset of the attack is still enlarged and painful at the close of the attack, while in acute rheumatic fever one joint follows another, the first becoming more or less normal, as the second becomes involved; there is less redness and swelling and even tenderness is less marked in arthritis deformans. As to the anemia spoken of by Dr. Van Wart, no true anemia exists in arthritis deformans. McCrae showed this to be so and he himself has never found any degree, either of chlorosis or anemia, in many examinations.

DR. STORCK said that in his clinic at the Charity Hospital he had treated quite a number of cases of arthritis deformans, using mainly ascending doses of Fowler's solution, beginning with five minims and increasing until 25 minims. He thought that medical treatment had but little effect and the disease in many cases arrested itself without external influence.

DR. JACOBY related a case he had under treatment for six months, with no benefit. He used tonics, hygienic and dietetic measures and was convinced that treatment was of little avail.

DR. HUHNER spoke of a case he had under treatment at the present time, and found nothing of benefit except the tincture of calchicum seed in 15 minim doses, which seemed to diminish the pain.

DR. VAN WART said that in reference to the etiology, it was impossible at present to say just what was the true cause. It might possibly be bacterial invasion primarily, which secondarily involved the nervous system. Still Mott's case would suggest the possibility, in some cases at least, of primary nervous origin. The pressure on the nerve roots in the spinal cases resisted all forms of treatment.

DR. VAN WART next read a short paper entitled :

### **A Note on Trypanosoma, with Demonstration of Specimens.**

Previous to 1843 organisms had been noted in the blood of fishes, frogs and rats by Valentin, Gluze, Remak, and others. In that year Gruby studied the form found in the frog, and gave it the name of *Trypanosoma sanguinis*. For many years forms were from time to time described and studied by various zoologists, though no attention was paid to their possible relationship to disease, and they were thought to be harmless parasites.

The discovery, in India, in 1880, by Evans, that a species of *Trypanosoma* was the cause of the surra disease in horses, attracted attention to this group. This specie was called *Trypanosoma evansi*, and has since been shown to be widely distributed. Later it was found that the tsetse fly disease of cattle in South Africa was due to another species, the *Tr. brucei*. A third species, *Tr. equiperdum*, Dofl., was shown to be the cause of dourine.

No species had as yet been shown to be pathogenic in man. On May 10th, 1902, Forde, a West African physician, saw in the blood of a ship captain suffering, supposedly, from malaria, snake-like bodies. He did not recognize, however, what they were. The man returned to England and was seen by Dutton, who examined his blood and found nothing. Both returned to Africa and Forde called Dutton's attention to the presence of these snake-like bodies

as a point of scientific interest. Dutton renewed his investigations, and found the parasite which he named *Trypanosoma gambiense*. In May, 1903, Sir Patrick Manson reported a second case in a white European missionary, who had returned to England after a residence in West Africa.

The etiology of the disease known as the sleeping sickness and African lethargy, was to this time far from being definitely settled. Sir Patrick Manson suggested that *Filaria perstans* was the etiological factor, and in order to settle this point a commission was sent out to the West Coast by the Royal Society of England.

The researches of this commission at first seemed to show that a streptococcus was the cause, as it was found very constantly at autopsies. Castellani, a member of this commission in 1902, while searching for this streptococcus in the cerebro-spinal fluid of a patient suffering from the sleeping sickness, say a trypanosome. Continuing his investigations he found them present in the cerebro-spinal fluid of 20 out of 34 cases. He also found the streptococcus present in 80% of these cases.

A second commission, headed by Lt.-Col. Bruce, corroborated Castellani's work, and found it constantly present in the cerebro-spinal fluid of 40 cases.

Inoculations into monkeys at first failed, but were later successful. Baker and Moffat found trypanosomata in the blood of five natives and one mulatto. The former showed no symptoms, the latter a slight pyrexia, which soon disappeared. Later they found 18 natives infected, who showed no symptoms.

Dutton and Todd have recently made an extensive report of their researches, corroborating the above. The pathology of the sleeping sickness has been studied by Mott, who has shown it to be a chronic meningo-encephalitis and myelitis.

During the past year trypanosomata have been successfully grown on artificial media by Novy, of Ann Arbor. The disease is readily inoculated into rats, and can in this way be easily transported.

Concerning the method of transmission of the disease in man a species of *Glossina* (Sambou, Brumpt) has been suggested as the intermediate host. The parasite has been found in various species of fleas as well. It is interesting to note that the first



symptoms in Manson's case were dated from the bite of some insect, supposed to be a species of *Glossina*.

Those interested in this subject may be referred to the articles in the *British Medical Journal*, *Lancet* and the *Journal of Tropical Medicine*, Proceedings of the Royal Society of England, the Thomson-Yates Laboratory Reports; the reports of the various commissions of the Royal Society, and Liverpool School of Tropical Medicine, and articles in the *Journal of the A. M. A.*

#### MEETING OF JUNE 25, 1904.

---

DR. MAGRUDER, President, in the Chair.

DR. H. B. GESSNER read a paper entitled:

#### "The Surgery of Arthritis Deformans."

Synonyms: Rheumatoid arthritis, osteo-arthritis.

Before going into the immediate subject of this paper, it will be well to settle at the start just what cases are to be labeled arthritis deformans, for up to a comparatively recent period there have been included under that general head two classes of cases: the one more acute in character, characterized by febrile exacerbations, spindle-shaped swellings, joint effusions, muscular atrophy and occurring in young persons; the other essentially chronic, presenting usually symmetric lesions, attacking the smaller joints, occurring later in life, with no constitutional disturbance and very little pain, its principal feature being disfiguration and limitation of joint movements, due to bony outgrowths. The tendency in the most recent modern literature appears to be to restrict the term arthritis deformans to the latter, chronic, group of cases and to view the former, acute, group, as a thing apart, perhaps identical with Still's disease, which is defined as a chronic progressive enlargement of the joints, associated with enlarged lymphatic glands and spleen and, again, perhaps identical with what Royal Whitman calls the polyarthritis of children.

Assuming this conclusion to be correct, let us, before proceeding

to the surgical aspect of this disease, review briefly the etiology, pathology and general treatment of the disease.

*Etiology.* A. E. Garrod and R. L. Jones, both of whom appear from their writings to have made a painstaking study of the disease, unite in attributing to disturbed nervous functions a prominent part in the production of this disease. The former calls it a dystrophy; the latter attributes its source to a toxemia that has a segmented action on the spinal cord, leaving in doubt the question of the autogenous or heterogenous nature of the toxemia. Jones calls attention to the frequent coincidence of arthritis deformans and exophthalmic goitre, and of the same disease with tetany, both associate diseases involving the nervous system. Other writers (Walsham among them) speak of physical and mental strain as causes of this disease: the athlete who subjects his physical mechanism to too great strain in his strenuous pursuits, and the overzealous brain-worker, sacrificing everything to ambition, forgetful of rest, of family, of social or civic duties, are alike subject to arthritis deformans. It is believed by some that the cause of the disease may yet be found to be an infection, entering through a neglected atrium in the alimentary canal or some other apparatus.

*Pathology.* The articular cartilages appear to be first involved, wearing away and exposing the articular bones underlying them. This may become eburnated from its exposure; on the other hand union of the exposed bone-ends may take place, Garrod speaking of bridges of cancellous tissue being identified between the denuded articular surfaces, while Markiewiz described 3 cases of chronic ankylosing inflammation of the spinal column. The bones also give off exostoses which greatly impede the joint movements, this contributing largely to the inconvenience and discomfort caused by the disease.

R. L. Jones considers the periarticular swellings due to vasomotor disturbances. Jones also believes that there is an undue tendency to centralize the disease in the joints, to the unfair exclusion of muscular and sensory involvement; he fails, however, to give us information as to the pathology of these last named lesions.

*Distribution.* While the disease tends to attack the smaller joints by preference, invading the temporo-maxillary articulation and converting the hands into knotted and gnarled masses, it by no means confines its ravages to these joints. The vertebral column

is not allowed to escape; the shoulder is at times affected. The probability is that when this disease will have been studied with greater thoroughness, it will be found that no joint is entirely free from this slow but persistent affection.

*Diagnosis.* The tendency to symmetry, to attack the smaller joints, to occur later in life, the absence of constitutional disturbance, the moderate severity of the pain, the disfiguration and limitation of joint movements by bony outgrowths, serve to distinguish the disease from gout, and, if I may be permitted to employ the term, acute rheumatism. From the latter arthritis deformans is especially distinguished by the rare occurrence of endocarditis as a complication.

Heberden's nodes are frequently observed, a majority of the patients seen by Merrins with this lesion having arthritis deformans.

Crackling in the joints on manipulation is said to be a symptom of value, this arising from the rubbing together of the roughened articular extremities. R. L. Jones speaks of the deep reflexes as uniformly more brisk on the diseased side. As the disease is usually symmetrical, he perhaps means the side more diseased. The phenomena described by him do not seem to conform to any particular law. And the observation, in its present state, is not applicable in a useful way. Pain is present in the muscles, as well as in the joints, of the same moderate character.

*General Treatment.* Writers agree in recommending care of the general health, open air exercise, good food, avoidance of physical and mental strain. Removal of any possible atria of infection should be effected where indications exist. Arsenic and cod liver oil may be given internally. Locally hot air and massage are generally commended. As to the use of passive movements of the joints, opinions differ. A. E. Garrod says passive movements of the joints do more harm than good; E. J. Cave recommends forced movements under anesthesia.

*Surgical Treatment.* This may be said to exist rather "*in posse*" than "*in esse*." Dr. R. M. Van Wart, in discussing the subject in a conversation, suggested that the obstructing and disfiguring bony outgrowths might be clipped off. This might be temporarily effective in badly crippled joints, giving an immediate improvement, which might be kept up by attention to the general

lines of treatment given above. Again, ankylosed joints might be subjected to resection. But such interference would have to be tentative. If the disease is mainly dystrophic, as would appear most likely, the traumatism might leave the patient less well off than before, on account of diminished powers of resistance and low healing power. Experience will point the way in this matter as in all others.

Another form of possible surgical interference is the transplantation of tendons to correct deformities of joints, due to the disease under consideration. An interesting instance is given by M. Moullin, who transplanted the insertion of the biceps femoris tendon for persistent contraction of the kneejoint in a case of rheumatoid arthritis, as he calls the disease.

Beyond the possible correction of joint deformities by osteotomy, by resection, by tendon transplantation, the field afforded the surgeon by the disease under consideration does not appear to be specially inviting or large.

In concluding this paper, I wish to specially thank Dr. R. M. Van Wart for his assistance, especially in the matter of bibliographic suggestions.

BIBLIOGRAPHY.—1. *Journal of Orthopedic Surgery*, 1903-04, I, pp. 153-163. Painter, Erving. Chronic Villous Arthritis, with Especial Reference to its Etiology and Pathology.

2. *British Medical Journal*, London, II, 1903, p. 1582. Moullin, M. Transplantation of the Insertion of the Biceps Tendon for Persistent Contraction of the Knee-Joint in a Case of Rheumatoid Arthritis.

3. *Beitrag z. Klin Chir.*, Tübingen, 1903, XI, pp. 650-672. Von Brunn, M. Ueber das Juvenile Osteoarthritis Deformans der Hüftgelenke.

4. *Boston Med. & Surg. Journal*, April 7, 1904. J. E. Goldthwait. Infectious Arthritis.

*American Year Book of Medicine and Surgery* (Gould), 1903, 1904.

#### DISCUSSION.

DR. LARUE mentioned a case in an emaciated subject which would give one the impression that there was a strong resemblance to tuberculosis. The disease was in the right knee, which he aspirated and applied a plaster cast to the leg and thigh. Disease never



appeared in that knee again, but in a little while the left knee became diseased, likewise the smaller joints, the hands, etc. The patient was operated on for septic infection following extra uterine pregnancy six months before.

DR. VAN WART mentioned that it was not necessarily a disease that comes on late in life. Still's disease is still little understood. Arthritis deformans sometimes occurs with an intercurrent disease. When the temporo-maxillary articulation becomes ankylosed, resection of wedge-shaped portions of the rami with formation of a false joint, gives good results.

DR. J. F. OECHSNER said that arthritis deformans was a problem for the pathologist. Orthopedic measures were at best palliative, and acted by ensuring rest.

DR. GESSNER, in closing the discussion, said that it was as yet not possible to say positively what good would be done in the vertebral cases by the application of casts, suggested by Dr. Oechsner. Cave and Garrod differ in regard to passive motion, the one favoring it while the other says it does harm. It has to be seen what experience teaches about the benefit of passive motion. If found useful, of course immobilization by casts will per contra not be indicated. He thanked Dr. Van Wart for calling his attention to the successful cases of excision of the temporo-maxillary joint for ankylosis from arthritis deformans; he had not been aware that the cases operated on were due to this cause.

DR. J. F. OECHSNER read a paper entitled:

### **The Rational Treatment of Splinters in the Foot.**

With the advent of the Fourth of July there appear, and very properly, many articles on the prevention of Fourth of July tetanus, and with the advent of summer there appear, and more particularly in our Southern country, many cases of that very prominently predisposing cause of tetanus, splinters in the foot.

The United States Census of 1900 shows that of 1664 deaths from tetanus during that year, Louisiana heads the list with 185.

Again, the *Journal of the American Medical Association* in its issue of August 9th, 1903, shows that of 466 deaths resulting from

Fourth of July injuries, 406 were due to tetanus, and of these not one occurred in the Southern States.

Taking these two facts into consideration, therefore, the appalling comparative death rate of tetanus in Louisiana, together with the fact that few, if any, occur from Fourth of July injuries, as the day is not celebrated here as it is North, we must look for other factors in the production of the disease.

How important a factor the splinter is we all know and every physician is aware of the frequency of the condition and, unfortunately, the fact that the patient has too often adopted the role of the surgeon, and the case comes under observation at a time when tetanus is fully developed and the patient is frequently beyond hope of recovery.

Some two years ago, as a matter of scientific interest, I had the splinters from four consecutive cases examined bacteriologically, with the result that the tetanus bacillus was found in one case, 25%. Surely this child was in imminent danger. At the same time I adopted as a routine treatment in my clinic the method in vogue in all well regulated hospitals and now probably more or less universally understood by all physicians. Under general anesthesia, or in adults or older children local anesthesia, the track of the splinter is laid bare, the foreign body, with all its accessory filaments, removed, the track curetted, then washed with 95% carbolic acid, followed by alcohol, the wound loosely packed, a wet bichloride dressing applied and a prophylactic dose of 10 c. c. antitetanic serum injected. In none of the four cases above mentioned, nor in others that have since followed, did tetanus develop.

Too often are we disposed, I fear, even where a case of splinter or any other foreign body capable of conveying the tetanus bacillus, is brought primarily to our notice, to adopt a less drastic measure of treatment than that above outlined, but general results would show a greater justification for the above radical method.

What are the principles underlying this modern rational treatment?

First, the tetanus bacillus is known to act in loco, and by generation of its toxins, which find their way along the motor nerve tracts, to the cord and there to occasion the tetanic seizure; hence, as far as possible, an absolute removal of the infective agent, together with an air bathed surface (since the bacillus is anaerobic), should mini-

mize the dangers of further toxin generation.

Second, It is the concensus of opinion, based upon wide experience and valuable statistical evidence, that antitetanic serum possesses its greatest virtue as a prophylactic rather than as a curative agent, not probably because of its inefficacy as such under proper conditions, but because the disease already has several days' handicap, its period of incubation being from 5 to 12 days.

The same suggestions above outlined would apply to any punctured wound produced by a foreign body capable of carrying infection.

#### DISCUSSION.

DR. DABNEY advised thorough removal of the foreign body, cleansing and cauterization with carbolic acid, without the use of alcohol.

DR. JACOBY asked whether there was not a certain danger in using local anesthesia? He felt that there might be some chance of carrying debris and the germ into the deeper tissue. Consequently would not object to the use of a general anesthetic. He firmly believed in the use of the antitoxin as a prophylactic measure.

DR. VAN WART said that the tetanus bacillus was an anaerobic bacillus. The pseudo-tetanus bacillus was aerobic. The distinction could be made only in the guinea pig, as they appear the same under the microscope. The true bacillus did not grow well in mixed infections. Good results were reported in the treatment of tetanus by injection of antitetanic serum intradurally and into the nerve sheaths. The intraneural method was based on experimental work, which seemed to show that the lymph space of the nerves was the means by which the tetanus toxin reached the spine.

DR. PARHAM could not agree with Dr. Van Wart as to the influence of secondary infection. He believed on the contrary that the pus coccus, by using up the oxygen in the wound, made it more favorable for the development of the tetanus bacillus, which thrived better in the absence of oxygen. He related the case of a boy run over by a wagon, which crushed his leg so as to require amputation. Subsequently tetanus developed, but in such form as to be amenable to treatment. In this case he believed that the amputation removed so much of the infection, that the dose of

poison was quickly diminished. In this case the antitetanic serum seemed to exert some effect.

DR. BARNETT quoted from the *Journal of the American Medical Association* that mixed infection was more favorable to the development of the tetanus bacillus.

DR. NELKEN said that the pain of the injection of antitoxin was a factor in highly nervous children. This was due not so much to the puncture of the needle as to the distension of the subcutaneous tissue with a large volume of fluid. He had found that by continuous spraying of the site of injection with ethyl chloride this pain was obviated.

DR. EUSTIS said that when an injection of antitetanic serum was objected to or not advised, cultures should at least be made of the foreign body and if the tetanus bacillus is found it would be criminal negligence not to give the serum. This could be ascertained in 36 hours, before the onset of the symptoms, in time for the serum to do some good, as the serum is prophylactic and not curative in its effects.

DR. LAZARD mentioned that one of the causes of greater mortality in the South was the large negro population and their particular susceptibility to this disease. In punctured wounds of the foot and hands, either by splinters, nails or toy pistol wounds, he immediately injects five c. c. of antitetanic serum as a prophylactic. This has been his practice the last eighteen months and has never seen tetanus follow punctured wounds, etc. The wound was treated by opening thoroughly, removal of all foreign particles and cauterization with iodine and iodide of potash in water. He believed that carbolic acid, while a good cauterant, did not possess sufficient penetrative power. He mentioned that the price of 5 c. c. of antitetanic serum was but \$1.00 and the cost could not be used as an argument against its wider use.

DR. LARUE believed greatly in the use of antitetanic serum as a prophylactic.

DR. OECHSNER, in closing, said that we should try to keep the wound open. He was not in favor of the thermo-cautery as the eschar would seal the wound. Infiltration might distribute wider the poison in the wound. He did not advocate general anesthesia in all cases, as in adults and older children local anesthesia might suffice. The intraspinal injection of antitetanic serum was more



rational than the intra-cerebral injection. In mixed infection the other bacteria destroyed the oxygen of the part and in this way the tetanus bacillus thrived better. The public should be educated to the dangers of holiday celebration, and indifference to the presence of foreign bodies in the foot and elsewhere, and we as physicians should give our patients the benefits of all modern investigations.

---

## Communication.

---

*Editors N. O. Medical and Surgical Journal:*

At a meeting of the Louisiana State Nurses' Association, held Tuesday, July 12th, the following resolutions were unanimously adopted:

Resolved, That the members of the Louisiana State Nurses' Association tender their thanks to the physicians of the State who supported them in their recent effort to secure State Registration for Nurses.

Resolved, That a copy of these resolutions be published in the Medical Journals of the State.

Resolved, That these resolutions be placed on the records of the Association.

(Signed) N. BROWN,  
E. COMFORD,  
M. SEDDON,  
*Committee.*

# N. O. Medical and Surgical Journal

---

## Editorial Department.

---

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

---

### Damiana Discredited as a Drug.

In the United States there is no drug which has had equal vogue with damiana as an aphrodisiac. Long ago the writer concluded after varied experiments with it that it had no special value and that its supposed effects were due in all probability to the phosphorus, nux vomica, or other tonics with which it is usually combined. It is rarely employed alone, hence we suppose very few can be at all aware of its true properties.

Dr. John Uri Lloyd has recently contributed an article on Damiana to the *Pharmaceutical Review*, written from La Paz, Mexico, the home of the shrub. He finds that it is used as a general beverage in the form of tea, by all classes, men, women, and children alike. It is sometimes used as a domestic remedy to relieve colic and as a hot drink when the menses are suppressed.

After careful and patient investigation, Dr. Lloyd concludes that it is too universally used by both sexes at all ages to be otherwise than harmless and undeserving of the qualities usually ascribed to it in a field where its innocent qualities forbid it a conspicuous place.

The doctor mentions partaking of some at his hotel and finding it not unpleasant to the palate. He makes no statement, negative or otherwise, concerning its effects at the time, hence we have the right to take for granted that he observed none.

It will be wiser to depend in the future on strychnia and the preparations of phosphorus. For our part, we prefer to pin our faith to the toothsome truffle and the elusive bivalve.

### The Medical Practice Act.

The amendments proposed by the Louisiana State Board of Medical Examiners and endorsed by the Louisiana State Medical Society failed to pass at the meeting of the Legislature which recently adjourned.

After being weakened by amendments in the House Committee it was passed by that branch of the legislative body, only two votes being recorded against it. From the Senate Committee it returned with a unanimous favorable report, yet it failed to pass the Senate, receiving twenty votes, one short of the number necessary.

This failure is regrettable but teaches some valuable lessons for the next attempt. Any bill decided upon must be introduced at the very beginning of the legislative session. The members of the profession must be more actively interested and give more assistance to the committee in charge of the bill. If due attention is paid to these points success is almost assured, for the short campaign of education carried on at this session gained many friends among the legislators for the restriction of the practice of medicine to reputable and authorized physicians.

---

### The Post Office Department to the Rescue.

It is stated on good authority that the Federal government through the Post Office Department will attempt to restrain fraudulent traffic in patent medicine and medical advice. The plan can be made most effective and is very simple. It is proposed to exclude from the mails, after due notice, periodicals and newspapers which persist in publishing advertisements aiding the traffic referred to above. As *Harper's Weekly* puts it: "This class of advertisements includes fake patent remedies which claim medicinal virtues which they do not and can not possibly possess, and the offers of quack doctors who promise what they can not perform, and accomplish a profitable work of deceit by the aid of lying testimonials."

Get-rich-quick concerns and lotteries are already being fought in this way with good effect. The analogy is evident. As *Harper's* says again: "There is no good reason why lotteries should be excluded from the mails while a legion of medical cheats—venders

of every sort of quack cure, from bogus pills to absent magnetic treatment—glean an enormous harvest of dollars from millions of dupes. The lottery people gave their customers a chance. The fraudulent medical advertisers give nothing that is of value, and often injure in body those whom they delude. Hundreds of them enjoy what is virtually a license to steal. If they can be choked off, all decent people should be glad to see it done.”

Already some of the most respectable publications are refusing this reprehensible class of advertisements. The others must be whipped into line. A good plan would be to give some tips to the Post Office Department. We shall be glad to have our attention called to particularly flagrant violations of the law and shall take pleasure in calling the attention of the proper authorities to them.

---

### **Guard Fever Patients.**

It may not be amiss to remind our readers that at all times, and particularly at this season it would be well to insist that all fever patients be guarded against mosquitoes by means of screens and good mosquito bars.

The pests have been unusually numerous and aggressive this year, and the comfort alone of the fever stricken unfortunates demands that due care be taken to protect them. Yet we know that this point is frequently overlooked; if not, that the repeated raising of the bar finally admits a number of mosquitoes, who miss no opportunity to sneak in. Hence, in houses that are not wire-screened, the sick-room of fever patients should be temporarily screened with bobinet or other suitable and cheap material. The expenditure of time and money would be trifling, still no one can calculate how much benefit would accrue from the habitual observance of these precautions—certainly a vast amount.



## Abstracts, Extracts and Miscellany.

---

### Department of General Surgery.

---

In charge of DR. F. W. PARHAM, assisted by DR. F. LARUE, New Orleans

---

THE DIAGNOSIS AND OPERATIVE TREATMENT OF TYPHOID PERFORATION.—Of late several interesting articles on intestinal perforation in typhoid have appeared in the medical journals.

Charles A. Elsberg, in *Medical Record* of July 9, 1904, published a paper based upon fifteen cases, four operated upon by himself and eleven operated upon by others of the surgical staff of Mt. Sinai Hospital, New York.

The main questions that confront the medical men attending a case showing symptoms suspicious of perforation are:

1. The diagnosis of perforation and the indication for operation.

2. In what cases shall operation be recommended when the diagnosis is in doubt?

In the diagnosis it is always important to take note of the entire course of the case. The tympanites, pain, tenderness and other clinical data should be carefully inquired into, that the significance of the present symptoms may be properly determined. The changes in the symptoms and signs of perforation from the beginning must be carefully observed. Usually in the writer's cases there was complaint of sudden abdominal pain or sudden increase of existing pain and tenderness. Thereafter, a number of signs and symptoms appeared and developed until the diagnosis became established. There was now more or less increase in pulse and respiration. Some were in collapse, though not the majority, the abdomen tender, distended and rigid to a varying degree and there were sometimes signs of free fluid and free gas in the peritoneal cavity. Collapse is much more rarely observed than is generally thought. The abdominal distention varied from slight to marked and was only occasionally due to free gas in the peritoneal cavity.

Diminution in area of liver dullness was a valuable diagnostic aid. This diminution was due very frequently, not to free gas, but to simple intestinal distention. Hence, it is important to percuss out the line of the colon and to know when the patient's bowels moved and the degree of flatus passed at the time.

Abdominal pain and tenderness are usually most marked on the right side of the abdomen, but frequently the tenderness is general and in two cases of the fifteen specially marked in the left iliac region.

The determination of the presence of free gas in the cavity is, of course, of importance, its presence being a positive diagnostic sign of perforation and an indication for operative intervention. The presence of movable tympany in the flanks with concomitant changes in the liver dullness is characteristic of free gas. This is usually made out by turning the patient first on one side and then on the other, percussing both flanks in these positions. It is, however, important not to move such patients too much and Elsberg, therefore, has adopted a very simple and safe expedient to avoid this danger. He has the head end of the bed raised very high while he percusses the upper and lower parts of the abdomen; then the head is lowered and the foot raised high and percussion again done and the changes carefully observed.

The temperature changes presented nothing characteristic. Leucocytosis was rarely marked and frequently very little above the normal.

As to the indications for surgical intervention Elsberg considers the establishment of the diagnosis as sufficient. Nothing short of a moribund condition should be considered a contraindication to operation. If the existence of perforation is not in doubt, delay will be inexcusable, but if the symptoms have existed for more than twenty-four hours and the condition of the patient remains good, the diagnosis being still in doubt, perhaps, because the case has only just come under observation, the surgeon is justified in advising delay for a few hours, if the case can be watched carefully.

The operation when undertaken must be quickly done and no unnecessary manipulation should be carried out.

Other conditions than the simple perforation must be noted and attended to at the operation, such as adhesions (very rare) and deep ulcerated Peyer's patches not yet perforated. All such patches re-

quire suture, if possible without too great encroachment on the lumen, or resection of ulcer-bearing areas if suture be not proper and the condition of patient permits. It is remarkable how well these patients stand the operative interference, when not too prolonged, and improvement is immediate in many. This immediate improvement has great prognostic importance as the course was generally favorable where the temperature especially showed a marked drop in the first twenty-four hours.

The writer then goes into some details regarding the operative manipulations. He believes in flushing with isotonic saline solution and he thinks drainage, though not too large, should be employed. He prefers general anesthesia by chloroform preceded by morphin hypodermatically, believing that thus the operation may be more quickly completed and generally speaking with less shock than under cocain anesthesia.

---

## Department of Obstetrics and Gynecology.

---

In charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER, New Orleans.

---

REMARKS ON PUERPERAL INFECTION with special reference to the Chandler and Pryor methods of draining the uterus and pelvic cavity.—The transactions of the Obstetrical Society of Philadelphia, April 17, 1904, contained a lengthy discussion of the surgical treatment of puerperal infection, prompted by a paper of Dr. Swithin Chandler, "A New Operation for Puerperal Sepsis."

The remarks of Dr. Barton Cooke Hirst on the above point are of such value that they are reproduced. He states that Pryor's proposal to drain the pelvis is more rational than is Dr. Chandler's, but it too is founded on incorrect premises, is not the result of sufficient clinical experience with all forms of puerperal sepsis, and is wrong in principle. When in doubt in a case of metritis whether the inflammatory product is in the uterine wall and is about to break into the peritoneal cavity, or whether it is contained within and limited to the wall, he still resorts to an exploratory abdominal section. He does also in cases of pelvic cellulitis to be sure there is no intraperitoneal involvement. From a considerable experience in the inspection of the pelvic cavity in cases of sepsis he is in a

position to say that Dr. Pryor's premises on which he bases his procedure for opening the vaginal vault are incorrect. The pelvic peritoneum is not immediately invaded in streptococcic infection and is usually never invaded at all. He has seen a number of cases of the gravest infection in which there was no involvement of the pelvic or abdominal peritoneum. The pelvic peritoneum is often entirely unaffected and there is no serum in the pelvic cavity.

If therefore Pryor's procedure is incorrect, Dr. Chandler's is totally unwarranted. Hirst asked what proportion of cases are infected in Douglas' sac. A large experience is necessary to decide this question. He had rarely seen infection in the puerperium confined to Douglas' pouch. Out of a large number of cases seen annually he sees a very small proportion of such cases. When we determine its localization in Douglas' pouch by easily appreciable physical signs, we are all agreed that colpotomy is indicated, but to do this operation simply because we don't know what else to do and feel that we must do something, is a proposal discreditable to surgery.

STERILITY IN WOMEN, TREATMENT OF ORIFICIAL ATRESIA OF THE CERVIX UTERI.—A lengthy extract of a paper by J. A. Doleris, which first appeared in *La Gynécologie* is found in the *Jour. of Obst. and Gynec. of the British Empire*. Doleris offers a new technic for the treatment of these cases. Some surgeons divide the vaginal portion right up to the level of the vaginal insertion. The result of this is a cervix which gapes like a duck's beak, with a large double ectropion, not a condition favorable to conception. Doleris himself prefers to excise a wedge shaped portion of tissue  $1\frac{1}{2}$  cm. long on each side of the external os, the apex of the wedge being deep, the base superficial. This can be done without an anesthetic. Slight application of the thermocautery stops the bleeding.

After being packed with gauze for ten days to a fortnight the cervical canal remains open and gaping with no entropion, and no possibility of the sides again coming in contact with one another. If this operation fails he advises Simon's plastic operation, *i. e.* a conical excision of the free edges of the lips of the cervix, leaving a clear orifice covered internally by ciliated epithelium.



## Department of General Medicine.

In charge of DR. E. M. DUPAQUIER, New Orleans.

**COLLARGOL IN MALIGNANT DIPHThERIA.**—Malignant diphtheria having increased in Paris of late years and antitoxin having almost entirely failed to act in this peculiarly malignant form of diphtheria, Netter thought of using collargol which in his own hands had already proven so effective in a number of infectious diseases. The result was a reduction of 50 per cent. in the mortality. Collargol was administered by means of inunctions and intravenous injections. the latter were chiefly used in cases where quick action was necessary. In some cases, a remarkable improvement followed the very first intravenous injection; all cases after the second injection were better; the child was lively, interested in things about him, he called for food and rested pretty well. While the membranes did not, the edema of the neck and the horrible fetidity of the breath did improve quicker than usual. Collargol was employed in addition to the ordinary drugs and measures, including antitoxin, camphorated oil, strychnin, artificial serum, etc.

*For Inunctions.* Ointment with 15% of collargol, the exceptient being a mixture of vaselin and lanolin (20%). Rub on the surface of the thighs, 2 or 3 times a day.

*For Intravenous Injections.* Solution of 1-100. Inject from 2 to 5 c.c. at a time, repeat if necessary.

How collargol acts is impossible to explain. The fact remains that a number of cases which looked fatal were cured so rapidly at times as to cause surprise. (*Jour. de Med. et de Chir. Prat.*)

**SUDDEN DEATH IN ACUTE AORTITIS.**—In cases where the cause of sudden death can not be determined, it is often possible to explain it by lesions found in the aorta, if the latter is very carefully examined post mortem. The evolution of aortitis may be latent. Any occasional cause of arterial hypertension such as cold, emotions, trauma, accouchement, coitus, will bring about death, either by rupture of the artery or oftener by exhibition from reflex action. Remember that besides trauma and the chronic intoxications such as alcoholism, tobaccoism, syphilis, etc., the large group of infectious diseases, such as the eruptive fevers, typhoid, pneumonia, erysipelas,

la grippe, gonorrhea, etc., affect the aorta. Therefore aortitis must be more common than it is supposed or admitted. In forensic medicine such knowledge is obviously enlightening. Here is an example to illustrate its importance.

Two men were quarreling; suddenly one of them in a fit of anger, assaults the other and holds him by the throat, but not tight enough nor long enough to choke him, since at no time he ever meant to actually do so. Yet the assaulted man dropped dead on the spot. Autopsy revealed marks of trauma about the neck and the indication of asphyxia were most evident. But an acute aortitis was also found and it was learned that the dead man had had attacks of angina pectoris with dyspnea and profuse expectoration. The expert's testimony was the following: The trauma about the neck was too light to cause strangulation. There existed an acute aortitis which was capable of determining sudden death by asphyxia on the occasion of a simple strain, as in a fisticuff.

So here the cause of death, on the surface a suspicious one, was in fact natural and an innocent man was freed from the unproven charge of murder. *Ibid.*

---

## Department of Therapeutics.

---

In Charge of DR. J. A. STORCK, New Orleans.

---

DOSAGE IN RADIOTHERAPY.—Béclère urges the general adoption of a chart as a means of keeping the record of cases submitted to radiotherapy. The therapeutic reaction to the X-rays depends on the amount of rays absorbed. He uses the Holzknecht chromoradiometer, and proclaims that it is no more necessary to induce a dermatitis in X-ray treatment than to induce stomatitis in mercurial treatment of syphilis. The aim should be to have the maximum quantity of rays absorbed at each exposure compatible with the integrity of the integument, skin or mucosa. Also to have the interval between the exposures as short as is compatible with the integrity of the integument, skin or mucosa. The maximum dose is less for the young than for adults, and less for adults than for the aged. When the skin is normal this dose varies for the face from

3 to 4 Holz knecht units; for the joints, 4 to 6 H. units; for the trunk, scalp, palm and sole, 5 to 7 H. units.

When the skin has been the seat of a recent inflammation and especially if the inflammation still persists, these figures should be reduced 1 to 2 H. units. On the other hand, these doses can be far surpassed in case of an ulcerating surface. Seven days is the usual interval he prefers. The chart he recommends is an ordinary fever chart, the dates marked off above as usual and the horizontal lines indicating the number of H. units at each sitting. The curve is thus represented by a vertical line representing the number of H. units, followed by a horizontal line representing the number of days that elapse before the second exposure, when the line runs straight up as before through the proper number of H. units, then horizontal again through the days of the interval before the next exposure. The curve forms thus a series of steps, like a flight of stairs, on which can be read at a glance the dosage, intervals and number of exposures. He gives an illustration of a typical chart and describes several cases to show the benefits derived from such accurate dosage. He quotes Sabouraud's experience that 4.5 to 5 H. units are the proper dose for the treatment of alopecia areata. This causes the necessary falling out of the hair without any apparent inflammatory reaction.—*Jour. A. M. A.*, June 11, 1904.

---

## Department of Ophthalmology.

---

In Charge of Drs. BRUNS AND ROBIN, New Orleans.

---

TREATMENT OF GONORRHEA OF THE EYE.—Hirsch reports the prompt cure of a threatening case of gonorrheal inflammation of one eye from auto-infection. He commends the technique followed as promising surprising results for such cases. He made a single subcutaneous injection of a 1-500 solution of hydrargyrum oxy-cyanate to which a little acoïn had been added. There was considerable irritative reaction, but the progress of the process was arrested and three days later the cure was completed by a repetition of the injection.—*Journ Amer. Med. Assn.*

EPILEPSY AND EYESTRAIN.—At the instance of the superintendent of the Craig Colony, Dr. Gould visited it in August, 1902, and made a thorough test of the ocular conditions and the benefit of their correction in 78 patients. The number of attacks each patient had had before this study and after was recorded, and in one case in which the patient had grand mal of great severity it seems that arrest was made and a possible cure may be anticipated. He has had no attack for a period of 11 months. Five previous arrests were possibly sustained by the use of glasses, and there was an apparent decrease of the attacks in 11 cases, though not permanent or so slight as to make it impossible to say that it was not due to the ordinary fluctuations of the disease. In 33 cases the attacks appeared to be increased, and in 16 there was no change whatever in the symptoms. The experiments, Spratling says, seem to prove that in looking for the cause and cure of epilepsy we must not confine our attention to any single organ and its abnormalities, but must study the whole organism and its parts. He regrets that the experiments, so carefully and scientifically made by Drs. Gould and Bennett, did not yield better results, but it strengthens his opinion that epilepsy is not a "single prescription disease," so to speak, and that the correction of ocular abnormalities alone is not any more likely to cure it than surgical measures on the brain from which so much was at one time hoped. Dr. Gould publishes an addendum to the paper in which he supports his formerly expressed views and thinks that two mistakes were made in conducting the experiments: 1, that young patients and only those with less injured nervous systems should have been chosen, and 2, that resident or frequently visiting opticians and oculists should have been insured to make the retestings and readjustments when necessary. Still he considers that the apparent improvement is 19 out of 57 patients, and the one cure in 57 against one in 80 by all other methods of treatment, indicate the value of the method.—*Journal A. M. A.*



## Department of the Ear, Nose and Throat.

---

In charge of A. W. DEROALDES, M. D., and GORDON KING, M. D.,  
New Orleans.

---

A NEW METHOD OF TREATING ADHERENT SOFT PALATE.—Dr. J. E. McDougall recently described before the British Laryngological Association a method by which he has been obtaining excellent results in the treatment of this obstinate and trying condition. His plan is to attach a thin plate of metal to an artificial tooth plate or a light wire frame fixed to the teeth, and to this a tube which is made to pass behind the velum into the naso-pharynx. The tube acts as a dilator as well as affording a passageway for air. The author does not advise operative interference unless there is complete occlusion causing loss of function of the palate and lack of ventilation in the naso-pharynx.

TREATMENT OF ATROPHIC RHINITIS WITH ACETOZONE.—Dr. James M. Brown gives a preliminary report of three cases of advanced atrophic rhinitis treated with a spray of one-half per cent acetozone in a neutral inorganic oil. The action is that of a strong antiseptic, and according to the claims of the author, causes a rapid diminution in the crust formation and discharge.

GANGRENE OF THE TONSIL.—Chas. W. Richardson, of Washington, reports a case of this malignant affection seen by him in which the first symptoms resembled those of diphtheritic inflammation of the tonsil. Anti-toxin (16000 units) was given without effect and extensive deep-seated sloughing took place about the affected tonsil. The patient was in a state of profound septic infection, to which he rapidly succumbed. No bacteriological examination was made to determine the exact nature of the infection. The writer has seen a similar case where the affection began as a peritonsillar cellulitis, and the gangrenous process extended to the palate and gums in the form of distinct patches with rapid spreading tendency. Septic infection was marked from the beginning, and caused a fatal termination.

AN UNUSUAL CASE OF PAROSMIA.—In a very large proportion of cases of parosmia, or perversion of the sense of smell, the sub-

jective odor complained of by the patient is offensive. A case reported by Dr. Carl E. Munger, was affected with a subjective odor which he claimed was identical with that of heliotrope. While retaining his normal sense of smell for unpleasant odors, he claimed that every liquid and every perfume smelled of heliotrope. Patient was a sufferer from general arteriosclerosis due to long continued abuse of alcoholics. The condition came on gradually and gradually disappeared, except in regard to the odor emanating from the axilla which continued to smell of heliotrope. Parosmia is usually attributed to some central lesion affecting the olfactory bulb or the nerve center itself, but also is observed as an aura of epilepsy.—*Laryngoscope*, May, 1904.

---

## Louisiana State Medical Society Notes.

---

In charge of DR. ISAAC IVAN LEMANN, Secretary, 163 University Place.

---

OFFICERS—President, Dr. Charles Chassaignac, New Orleans; 1st Vice President, Dr. Oscar Dowling, Shreveport; 2nd Vice President, Dr. L. C. Tarleton, Marksville; 3rd Vice President, Dr. J. F. Buquoi, Colomb; Secretary, Dr. Isaac I. Lemann, New Orleans; Treasurer, Dr. M. H. McGuire, New Orleans.

COUNCILLORS—Drs. A. G. Friedrichs, Chairman, 2nd Cong. Dist., 641 St. Charles St., New Orleans; J. J. Ayo, Sec'y., 3rd Cong. Dist., Bowie; P. E. Archinard, 1st Cong. Dist., New Orleans; S. L. Williams, 5th Cong. Dist., Oak Ridge; N. K. Vance, 4th Cong. Dist., Shreveport; C. M. Sitman, 6th Cong. Dist., Greensburg; C. A. Gardiner, 7th Cong. Dist., Sunset.

---

### MINUTES.

SECOND DAY—WEDNESDAY, MAY 11, 1904.

#### MORNING SESSION.

Meeting called to order by First Vice President, DR. L. G. LEBEUF.

DR. W. G. OWEN, Chairman of the Section on General Medicine, absent.

DR. J. B. ELLIOTT, JR., read a paper entitled "Complications of La Grippe."

Discussed by Drs. J. B. Elliott, Sr., P. E. Archinard, A. A. Allain, L. Lazaro, E. H. Smith, Provosty, Bruns, E. D. Martin, LeBeuf and Dr. Elliott, Jr., in closing.

DR. GEORGE J. FRIEDRICH, Chairman of the Section on Oral Surgery, read a paper entitled "Dental Caries and Popular Fallacies."

Discussed by Dr. E. D. Martin.

SECTION ON ANATOMY AND PHYSIOLOGY.—Dr. S. P. Delaup, Chairman, read a paper entitled "Anatomical Anomalies."

SECTION ON QUARANTINE.—Dr. F. J. Mayer, representing the Chairman, Dr. J. N. Thomas, who was unable to be present, read Dr. Thomas' paper on "Yellow Fever Infection: with our present knowledge of the conveyance of the infection by the Mosquito and the lack of positive information as to infection through other sources, would quarantine officials, as protectors of public health in Yellow Fever infection, be justified in accepting the mosquito as the only means of carrying the disease?"

Discussed by Dr. Kohnke, Prof. Beyer, Drs. Patton, E. D. Martin, F. Loeber and Dr. Mayer in closing.

DR. E. M. HUMMEL, of Jackson, read a paper entitled "A Case of Circular Insanity, with a Study of Periodicity in the Display of Psychic Phenomena."

Discussed by Dr. Guthrie and Dr. Hummel in closing.

DR. F. W. PARHAM, New Orleans, read a paper entitled "Edebohl's Decapsulation of the Kidneys."

Discussed by Drs. E. D. Martin, T. E. Schumpert, Batchelor, Larue, J. F. Oechsner, Guthrie and Dr. Parham in closing.

DR. A. F. BARROW introduced the following resolution:

*Whereas*, The Eye, Ear, Nose and Throat Hospital of New Orleans is entirely dependent for its maintenance on the generosity of the public, and that this charity is extended to the poor and sick, irrespective of the parish or section from which they come.

*Whereas*, The medical profession itself has derived material benefit, both from educational and other directions, since the foundation of the Institution, and its maintenance in the future directly affects the interests of the profession at large, and, moreover, the Institution needs the support of the profession in directing the attention of the charitably inclined, as well as that of the public spirited citizen.

*Be it resolved,* That the members of the Louisiana State Medical Society at this meeting, especially those who reside in the country parishes, believe that every effort should be directed at the continuance of the cordial spirit between this institution and the profession at large, and that the daily press, as well as the citizens of each parish, shall be earnestly invited to influence their respective police juries in the end that they may direct a liberal annual donation in favor of this charity.

On motion the resolution was adopted.

Minutes of previous day were read, corrected and approved.

Adjourned to Chess, Checkers and Whist Club for lunch to visiting members.

#### AFTERNOON SESSION.

Meeting called to order at 3:47 by the President.

On motion Section on Medical Jurisprudence was made special order of business for afternoon session on Thursday.

SECTION ON DERMATOLOGY.—Dr. H. E. Ménage, New Orleans, read a paper entitled “Pruritus Considered from a General Standpoint.”

DR. J. F. OECHSNER read a paper entitled “Acute Suppurative Osteomyelitis; the Importance of its Early Recognition and Treatment.”

Discussed by Drs. Larue, Martin, Lazard, LeBeuf, Van Wart, Clark, and Dr. Oechsner in closing.

On motion the order of business was suspended and the former Acting Treasurer and the present Treasurer read reports as follows:

#### EXTENDED REPORT OF ACTING TREASURER, MAY 20, 1903.

*To the Officers and Members of the Louisiana State Medical Society:*

At the 1903 meeting I presented a report as Acting Treasurer, up to and including April 27, 1903, which summarized as follows:

Total dues collected.....	\$1770.15
Less exchange.....	1.55
Net collections to 1903 meeting.....	\$1768.60
Turned over by Dr. H. S. Cocram, Treasurer.....	407.41



Total amount received, including April 27, 1903.....	\$2176.01
Total expenditures, as per checks and vouchers (one check outstanding).....	1304.44
Balance on hand April 27, 1903.....	\$ 871.57

At that time I suggested that an Auditing Committee be appointed to report in writing on the details of papers pertaining to the Treasurer's office, as I expected to turn over at once to the Treasurer my balance and let him receipt for the dues paid during the 1903 meeting.

Owing to the absence of the Treasurer from the State I was forced to handle the dues paid during the meeting, and for nearly a month afterwards to keep my accounts open.

On May 20th, 1903, my accounts were closed and the newly-appointed Treasurer, Dr. M. H. McGuire, assumed charge.

I have, therefore, prepared this extended report to cover the whole period during which I served as Acting Treasurer.

Dues collected at 1903 meeting, April 28 to 30, 1903..\$ 885.00

Dues collected after close of meeting, April 30th, to May  
20, 1903, inclusive..... 130.00

Total dues collected after making 1903 report.....\$1015.00

Total expenditures after making 1903 report, April  
30-May 20, 1903, checks No. 59-62 inclusive..... 352.50

\$ 662.50

Add balance on hand April 27, 1903.....871.57

\$1534.07

Paid Dr. M. H. McGuire, Treasurer, through error.... 2.10

Amount turned over to Dr. M. H. McGuire, Treasurer,

June 11, 1903.....\$1536.17

So far as I have been able to ascertain by careful investigation the active membership at the close of the 1902 meeting was 419, some of whom owed dues for 1902 and some for 1901 and 1902. My collections during the entire period from June 7, 1902, to May 20, 1903, were as follows:

For 1901 dues.....	\$ 310.00
For 1902 dues.....	1365.00
For 1903 dues.....	1110.00

Total dues collected, as per cash book.....\$2785.00

I submit herewith the tabular statements of the financial status of all members at the close of May 20th, 1903. These show:

All dues paid, including 1903.....	218
Still owing 1903:	
Old Members.....	163
New Members.....	65
	<hr/>
	228
Still owing 1902 and 1903.....	31
Still owing 1901, 1902 and 1903.....	1
	<hr/>
	478
Status unsettled.....	11
	<hr/>

Total membership..... 489

Total members still delinquent 260, plus 11 whose exact status is still unsettled.

I ask that this completed report be referred to the Auditing Committee asked for by Dr. McGuire, Treasurer, to audit his report.

WM. M. PERKINS, M. D.,  
*Acting Treasurer.*

#### PRELIMINARY REPORT OF TREASURER.

*To the Officers and Members of the Louisiana State Medical Society:*

GENTLEMEN.—Having been appointed by your Council to fill the vacancy caused by the resignation of your Treasurer, Dr. H. S. Cocram, I entered upon my duties in June, 1903. Notices were sent to all delinquents early in July, 1903, and again, to those who did not respond, early this year. Of the 260 delinquents, as per Acting Treasurer's Report, 193 have paid, leaving 67 still delinquent, of whom 16 owe 1902 and 1903 dues.

Receipts and disbursements during my incumbency have been as follows:

Received from Dr. Wm. M. Perkins, Acting Treasurer, (cash in bank).....	\$1366.37
Assistant Secretary's note (which has been paid).....	169.80
	<hr/>
Total .....	\$1536.17
Received from members as dues for 1902-03-04.....	2856.00
	<hr/>
Total receipts .....	\$4392.17
Total expenditures (as per vouchers).....	1724.93
	<hr/>

Balance on hand May 10, 1904.....\$2667.24

Because of the tardiness of some of the Parish Secretaries in forwarding the State dues of their members, some of them not having reached me yet, I have not made a tabulation of members in good standing. Dues for 1904 of approximately 550 members have been credited and others are in transit.

Owing to the incompleteness of this report, I ask that an Auditing Committee of three members be appointed to meet June 1, 1904, whose duties shall be to receive my full report and to examine my books.

Respectfully submitted,  
M. H. MCGUIRE,  
*Treasurer.*

On motion both reports were referred to the Auditing Committee, to be appointed as asked for.

The Council reported as follows on names of six applicants from unorganized parishes:

#### APPLICANTS FOR MEMBERSHIP.

##### *To the Council:*

The following applications are submitted for your approval:

Dr. H. Abramson, St. Joseph, Tensas Parish, La. Graduate of Memphis Hospital Med. Col., 1901. Recommended by Drs. E. T. Newell and E. D. Newell.

Dr. M. M. Hearn, Eros, Jackson Parish. Atlanta Col. of Phys. and Surgs., 1902. Recommended by Drs. R. F. Harrell and S. L. White.

Dr. N. J. Milstead, Waverly, Madison Parish. Louisville Med. Col., 1886. Recommended by Drs. J. M. Barrier and J. E. Thompson.

Dr. Wm. Sellers, Junction, Ark. (Practices in Union Parish). Univ. of La., 1870. Recommended by Drs. J. E. Knoghton and J. C. Willis.

Dr. Thomas B. Odom, French Settlement, Livingston Parish. Tulane, '94. Endorsed by Drs. E. O. Powers and C. M. Sitman.

Dr. W. E. Long, Atherton, East Carroll Parish. Bellevue Med. Col., 1884. Endorsed by Drs. J. M. Barrier and J. E. Thompson.

Yours truly,  
WM. M. PERKINS, M. D.,  
*Secretary.*

The above applications for membership are recommended by the Council.

A. G. FRIEDRICH, M. D.,  
*Chairman of Council.*

On motion the Secretary was instructed to cast the ballot of the Society for the six applicants named.

On motion resignation of Dr. L. G. Wille, who had moved to Texas, was accepted.

DR. MAGRUDER asked for a ruling on the exact status of members of the State Society in parishes organized and chartered.

The President ruled that the old members of the Louisiana State Medical Society, in parishes with a Component Society, must join such Component Society to retain membership in the State Society.

Adjourned.

#### NIGHT SESSION.

Meeting called to order by the President, with nearly 200 present, including members and visitors, this being the session to which the public was invited.

The President, DR. J. M. BARRIER, delivered his Annual Address.

REV. WILLIAM McFADDEN ALEXANDER delivered the Annual Oration.

DR. STANFORD EMORY CHAILLE, Honorary Member, and one of the founders of the Louisiana State Medical Society, was requested to address the meeting, and delivered a brief extemporaneous address upon the history of the organization movement in the State.

DR. QUITMAN KOHNKE illustrated with lantern slides the life history of the mosquito and showed the efficacy of oil in the destruction of the larvæ.

As the remainder of the proceedings of the evening were to be technical, a recess of two minutes was taken to allow visitors to withdraw. After the recess Dr. E. D. Martin demonstrated with lantern slides the results of treatment in a number of cases of deformities of the leg, under the title, "The Necessity for Surgical Intervention in Deformities of the Legs."

DR. J. M. BATCHELOR read a paper on "Some Remarks on the Treatment of Club-Foot by the Method of Lorenz—Report of Cases." This was illustrated by lantern slides.

Owing to the lateness of the hour discussion on these two papers was omitted.

On motion all communications, etc., in the Secretary's hands and requiring such attention, were referred to special committees to be appointed by the President.

On motion the Secretary's report was made the special order of



business for the morning session, immediately after the call to order.

Adjourned.

THE AVOYELLES PARISH MEDICAL SOCIETY met on the 7th of July at Bunkie. The subject chosen for discussion at the meeting was "Gastro-Intestinal Troubles We Meet in the Summer Time." The diseases, gastro-enteritis, cholera infantum and typhoid fever, were each discussed and the treatment used by each physician was carefully considered. In addition to the subject for discussion, Dr. Emil Regard, of Mansura, reported two clinical cases, "Osteomyelitis of the Clavicle with Resection," and "Gun-shot Wound of the Intestine with Four Perforations—Operation—Recovery." The last subject was shown the Society. Dr. C. J. Ducoté read an interesting paper on "Hernia of the Ovary; Removal; Recovery." Three new members, Drs. T. L. Lougard, Moreauville; D. J. Lemoine, Cottonport, and S. J. Couvillon, Plauchéville, were elected to membership. This makes the total membership of the Society twenty-seven. The Society meets next at Marksville the first Thursday in October. "Fevers" is the topic chosen for discussion.

DR. C. A. GARDINER, Councillor Seventh Congressional District, was a visitor to New Orleans in July.

THE ASCENSION PARISH MEDICAL SOCIETY held a well-attended quarterly meeting at Donaldsonville on July 13th. Two new members were elected, bringing the membership to 16. General discussion was had on the subjects of "Typhoid Fever" and "Malaria." The next meeting will take place at Dutchtown on October 12, 1904.

---

## Medical News Items.

---

JULY 11-14, 1905, HAS BEEN SELECTED as the date for holding the next meeting of the A. M. A. in Portland, Oregon. This is later than usual and the date is made because many of the physicians take their vacation at that time and all of the Medical Schools are closed.

Besides the attraction of a trip to Yellow Stone Park there will be special trips to the Hawaiian Islands and to Alaska. The Lewis and Clark Centennial Exposition will be open at that time.

A BOARD OF OFFICERS will be convened to meet at the Bureau of Public Health and Marine Hospital Service, 3 B Street, S. E., Washington, D. C., Monday, October 3, 1904, at 10 o'clock A. M., for the purpose of examining candidates for admission to the grade of assistant surgeon in the Public Health and Marine Hospital Service.

Candidates must be between twenty-two and thirty years of age, graduates of a reputable medical college, and must furnish testimonials from responsible persons as to their professional and moral character.

The examinations are chiefly in writing, and begin with a short autobiography of the candidate. The remainder of the written exercise consists in examination on the various branches of medicine, surgery, and hygiene.

Successful candidates will be numbered according to their attainments on examination, and will be commissioned in the same order as vacancies occur.

After five years' service, assistant surgeons are entitled to examination for promotion to the grade of passed assistant surgeons.

Promotion to the grade of surgeon is made according to seniority, and after due examination as vacancies occur in that grade.

Assistant surgeons receive sixteen hundred dollars; passed assistant surgeons, two thousand dollars, and surgeons, twenty-five hundred dollars a year. When quarters are not provided, commutation at the rate of thirty, forty, and fifty dollars a month, according to grade, is allowed. All grades above that of assistant surgeon receive longevity pay, ten per centum in addition to the regular salary for every five years' service up to forty per centum after twenty years' service.

The tenure of office is permanent. Officers traveling under orders are allowed actual expenses.

For further information, or for invitation to appear before the board of examiners, address the Surgeon-General, Public Health and Marine Hospital Service, Washington, D. C.

ABOUT 300 PHYSICIANS WILL PROBABLY BE SENT to the Isthmus of Panama by the Government. Young, active and hardy physicians will be needed. A preference will be shown to those just graduated from hospitals. Col. Gorgas, the Chief Sanitary Officer of the Isthmus, is the one who will make the appointments and to whom applications might be made.

A STATUE OF DR. WILLIAM E. B. DAVIS, late of Birmingham, will be erected by the Southern Surgical and Gynecological Association of which Dr. Davis was the originator and organizer. The statue will be of bronze, 7½ feet high, on a granite pedestal 9½ feet high, and will be made by G. Moretti. It is to be finished by December first in order that it may be unveiled at the meeting of the Association.

THE AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION will hold its 14th annual meeting at the Inside Inn in St. Louis, on September 13-16, 1904. A highly interesting preliminary program has already been issued and we note among other important papers one on "*The Cataphoric Treatment of Cancer*," by Dr. Granger of this City.

Any further information desired can be furnished by either Dr. C. H. Hughes, who is Chairman of the Committee on Arrangements, or Dr. Clarence E. Skinner, the efficient Secretary of the Association, whose address is New Haven, Connecticut.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION will hold its 30th annual meeting at Cincinnati on October 11-13, 1904. Dr. Hugh T. Patrick, of Chicago, is President, and the annual orations will be delivered by Dr. William J. Mayo, of Rochester, in Surgery, and by Dr. C. T. Drennen, of Hot Springs, in Medicine.

Further information can be obtained from the Secretary, Dr. Henry E. Tuley, of Louisville, Ky.

THE PROGRESSIVE BOARD OF HEALTH OF CROWLEY, LA., at its last meeting in July passed an ordinance compelling physicians and mid-wives practising in Crowley to report each month all births occurring in their practice during the previous month.

THE POLICE JURY OF TERREBONNE PARISH made an appropriation of \$500.00 for the Eye, Ear, Nose and Throat Hospital of this City.

THE SUMMER POST GRADUATE TERM held by the lecturers and assistants of the New Orleans Polyclinic closed July 13 after a successful session.

THE 18TH ANNUAL SESSION OF THE N. O. POLYCLINIC will open November 7, 1904.

THE BOARD OF HEALTH OF HOBOKEN passed an ordinance providing for rules to be obeyed in barber-hops to prevent contagious diseases of the skin. This ordinance was sustained by the New Jersey Supreme Court.

AT THE LAST MEETING OF THE STATE BOARD OF DENTISTRY 14 out of 26 applicants passed.

THE HOUSTON CITY COUNCIL has adopted an ordinance requiring that cisterns be screened and that care be taken to have breeding places of mosquitoes cleaned out. Galveston is already screening cisterns and using oil in gutters.

MARRIED.—At Port Gibson, Dr. D. C. Anderson to Miss Mary Kate Butler. Dr. Anderson is a graduate of Tulane University and was formerly connected with the Louisiana State Board of Health in the Quarantine Service in Central America. At present he is a resident physician of Moss Point, Miss.

DR. A. J. PRICE and Miss Lilian Lagarde were married at Thibodeaux, La. Dr. Price is a prominent physician of this parish and was coroner until recently.

DIED.—DR. JOHN JASTREMSKI died at Baton Rouge on July 5 at the age of sixty-five. The deceased was for twenty-four years the Superintendent of the Deaf and Dumb Institute.

PERSONALS.—DR. WARREN S. BICKHAM has been appointed Instructor in Surgery at the Post-Graduate College and Hospital, New York.



DR. U. S. BIRD, of Tampa Florida, has been appointed Resident Surgeon of the Eye, Ear, Nose and Throat Hospital.

DR. WALTER E. BLACK, who recently attended the New Orleans Polyclinic, has removed from Leger, Okla., to Marion, Texas.

DR. R. O. MARCOUR has resigned from the Naval Service and opened an office in this City.

DR. MALLORY KENNEDY, formerly of this city, now of Pensacola, Florida, is spending a few weeks here for the purpose of pursuing special studies in surgery.

DR. FRANK GRAY, of Fort Worth, Texas, has been elected Dean of the Medical Department of the Fort Worth University in place of Dr. Bacon Saunders, who resigned after filling that post for ten years.

DR. J. B. HARGROVE, of Natchitoches, has been elected President of the Parish Board of Health.

DR. J. A. STORCK has resigned the Chair of Materia-Medica and Physiology in the New Orleans College of Pharmacy.

DR. M. B. POLLARD has returned to his old home in Winsboro, Texas, to practice. The doctor was located at Gadsden, Alabama, for a short time.

MESSRS. P. BLAKISTON'S SON & Co. had a very attractive and instructive exhibit of books at the Atlantic City meeting of the A. M. A. this year.

---

## Book Reviews and Notices.

---

*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

---

*Gynecology*, Volume IV of the Practical Medicine Series of Year Books, Edited by EMILIUS C. DUDLEY, A. M., M. D., and WILLIAM HEALY, A. B., M. D. Year Book Publishers, Chicago, 1904.

This is a concise review of the Gynecological literature of 1903, and is recommended to all who wish an epitome of the various papers of prac-

tical value appearing in the many medical journals, both domestic and foreign. The profession has watched with interest this departure from the beaten paths of cumbersome and expensive volumes, and the Year Book Publishers deserve the attention which their valuable series are eliciting. The work of the year is covered in ten volumes, issued monthly, and the book comprises on an average 216 pages. This number contains many illustrations, chiefly of technic of plastic vaginal operations, which are quite valuable.

MILLER.

---

*Obstetric and Gynecologic Nursing*, by EDWARD P. DAVIS, A. M., M. D. Second Edition. W. B. Saunders & Co., Philadelphia, 1904.

It was only a short while ago that the reviewer published a highly complimentary opinion of this very practical book, going, at the time, into detail discussion of its contents. It is useless to repeat to-day all that was said then. The book remains one of the best in the art of nursing. Every obstetrician, every gynecologist should urge his nurse to study this work.

MICHINARD.

---

*The Internal Secretions and the Principles of Medicine*, by CHARLES E. DE M. SAJOUS, M. D. Vol. I. Philadelphia, F. A. Davis Co., 1903.

This book is of more than usual importance, and discusses many new lines of thought. It consists of twelve chapters, and includes the study of the following subjects: the physiology of the adrenals as viewed from the standpoint of clinical pathology; the internal secretion of the adrenals in its relations to the respiratory processes, and the composition of the blood; same to the general oxidation processes; the internal secretions of the thyroid and thymus glands in their relations to the adrenals; the anterior pituitary body, the thyroid gland, and the adrenals as parts of an autonomous system the adrenal system and vasomotor functions; the adrenal system, the general motor system, and the pneumogastric nerve; the internal secretions of the pancreas and spleen; the adrenal and vagal systems in their relations to cardiac and pulmonary functions; the posterior pituitary as the functional center of the nervous system and as the anterior pituitary's co-center in sustaining the vital processes; the internal secretions in their relations to immunity; the internal secretions and the preservation of life.

The above enumeration alone is sufficient to indicate the scope, the interest, and the value of this volume. We shall await the publication of the second with pleasant anticipation. In the meantime we can recommend this one to all who can really appreciate scientific thought and research.

C. C.

---

*The International Medical Annual*, New York, E. B. Treat & Co., 1904.

The busy physician will find this work an excellent means of informing himself upon matters which might have escaped his notice in the journals. In the section reviewing therapeutic progress, the following appears: "The use of subcutaneous injections of gelatin also seems to be on the wane, and the fact that a French observer was able to collect no less than twenty-three cases of tetanus, which have occurred after their use within the last two years, will not increase the popularity of this particular form of treatment."

The experiments of Mircolo and Gervino on the blood, are mentioned as proving that alcohol possesses the power of neutralizing the toxine of tubercle, provided that the alcoholism has not reached a stage in which there is destruction of the tissues.

"There are great changes in the blood after alcohol, depending upon a diminution in the coagulating power, and an increase of haemolysis. It is therefore, evident that alcohol should not be used, when there is a tendency to hemoptysis." The technique of Dr. Rudolph Matas's method of treatment of aneurism, based on arteriorraphy is given. A number of stereograms illustrating the surgical anatomy of the ear, by James Kerr Lowe, M. D., add much to a clear understanding of the structures dealt with during the performance of the mastoid operation.

A review of the literature on radium, may be found in the book. One objection which we must urge is the admittance of advertisements of secret and proprietary medicines in the front and rear portions of the book. On the whole, it is a faithful review of the best that has been done and recorded during the past year.

STORCK.

---

*Röntgen Ray Diagnosis and Therapy*, by CARL BECK, M. D. D. Appleton & Company, 1904.

In this volume of 460 pages containing 322 illustrations, the author gives the benefit of his very large experience in the diagnostic and therapeutic uses of the Röntgen Rays. His special aim to demonstrate how the Röntgen rays can best be utilized in medical and surgical practice is well carried out. Though full description of many technical points are given, more explicit details in this particular can be found in other works.

In Section 1 of the book a general view of the apparatus, Röntgen technique, fluoroscopy, skiagraphy and examination of the patient is given. The regionary (clinical) part is replete with very important and interesting features. Of special interest are the chapters dealing with diseases of the bones and joints, neoplasms, and also the medico-legal aspects of Röntgen rays. This work can not but prove of great usefulness to the general practitioner, as well as to the specialist in X-ray work.

CAZENAVETTE.

---

*The Practical Medicine Series of Year Books*, Vol. V. Obstetrics, Edited by JOS. B. DE LEE, M. D. The Year Book Publishers, Chicago, 1904.

This little volume is one of a series of ten, issued at monthly intervals. The set covers the entire field of medicine and surgery, and each volume, which may be purchased separately, is "complete for the year prior to its publication."

The editor cannot be held responsible for the dissimilar views contained in this book, because it presents only a digest of the latest opinions of different best known writers. To the general practitioner it will prove instructive whether or not he accepts some of the opinions expressed. But there are many practical points brought out, which, though not exactly new, will bear repetition.

MICHINARD.

---

*A Practical Treatise on Medical Diagnosis*, by JOHN H. MUSSER, M. D. Lea Brothers & Co., Philadelphia and New York, 1904.

It is seldom that we come across books that we think every medical man should have. We recommend them to students, to practitioners, or to specialists, respectively, according to how we diagnose the works. This one, however, is fit for anybody and everybody who calls himself a physician. It is a big book, 1200 pages; it is complete, both as to general diagnosis and to special diagnosis; it is well and profusely illustrated; the paper and print are excellent; above all, it has the authority of Musser. Get it, and, especially, consult it.

C. C.

*The American Illustrated Medical Dictionary*, by W. A. NEWMAN DORLAND, A. M., M. D. W. B. Saunders & Co., Philadelphia, New York, London.

The third edition of this valuable dictionary, it has been carefully revised, and several hundred new terms have been added. The illustrations consists of over thirty full-page plates, more than half of which are colored, many of them very good, some indifferent.

The make-up of the book is very good. The type is clear, though not very large and allowing the work to be complete yet of moderate size, the paper is satisfactory; the cross references are ample; numerous tables have been included as well as much collateral information of an encyclopedic character; the soft leather covers make it easy to handle; and, all in all, it is a concise, complete and convenient work of reference. C. C.

---

*The Medical News Pocket Formulary*, by E. QUINN THORNTON, M. D. Lea Brothers & Co., Philadelphia, 1904.

As a Pocket formulary, this is as good as any, but we hope the day has passed when physicians will use such publications. STORCK.

---

## Publications Received.

**The Saglfield Publishing Co.,** Chicago, Akron and New York 1904.

*The Doctor's Recreation Series (The Doctor's Leisure Hour)*, Ed. by Charles Wells Moulton; Arranged by Dr. Porter Davis.

**The Grafton Press,** New York, 1904.

*The Surgery of the Heart and Lungs*, by Dr. Benjamin Merrill Ricketts.

**J. B. Lippincott Co.,** Philadelphia, 1904.

*International Clinics*, Vol. II, 14th Series.

**D. Appleton & Co.,** New York and London, 1904.

*The Clinical Study of Blood Pressure*, by Dr. Theodore C. Janeway.

**E. R. Pelton,** New York, 1904.

*Summer Diarrheas of Infants*, by Dr. H. Illoway.

**Lea Bros. & Co.,** New York, and Philadelphia 1904.

*A System of Practical Surgery*, Vol. III (*Surgery of the Extremities*), by Bergmann-Bull.

### Miscellaneous.

*Transactions of the American Roentgen Ray Society*, 1904.



## Reprints.

---

*Damiana (The Mexican Tea) Turnera Aphrodisiaca*, by Dr. John Uri Lloyd.

*Anatomy of the Inferior Ethmoidal Turbinate Bone, with Particular Reference to Cell Formation; Surgical Importance of Such Ethmoid Cells*, by Dr. Howard H. Lothrop, of Boston.

*A Preliminary Contribution to the Protozoan Fauna of the Gulf Biologic Station*, etc., by J. C. Smith, of New Orleans.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)

FOR JUNE, 1904.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	11	2	13
Intermittent Fever (Malarial Cachexia) .....	1	4	5
Small Pox.....			
Measles.....	1		1
Scarlet Fever.....			
Whooping Cough.....			
Diphtheria and Croup.....	2	1	3
Influenza.....			
Cholera Nostras.....	1	2	3
Pyemia and Septicemia .....	6	1	7
Tuberculosis.....	51	48	99
Cancer.....	15	6	21
Rheumatism and Gout .....	4		4
Diabetes .....	3		3
Alcoholism .....			
Encephalitis and Meningitis.....	7	5	12
Locomotor Ataxia.....			
Congestion, Hemorrhage and Softening of Brain.....	10	6	16
Paralysis .....	2	1	3
Convulsions of Infants .....	2	3	5
Other Diseases of Infancy .....	20	13	33
Tetanus.....	5	1	6
Other Nervous Diseases .....			
Heart Diseases.....	26	22	48
Bronchitis .....	2	6	8
Pneumonia and Broncho-Pneumonia.....	10	12	22
Other Respiratory Diseases .....		4	4
Ulcer of Stomach.....	3		3
Other Diseases of the Stomach .....	2	3	5
Diarrhea, Dysentery and Enteritis.....	44	18	62
Hernia, Intestinal Obstruction.....			
Cirrhosis of Liver.....	8		8
Other Diseases of the Liver .....	7	2	9
Simple Peritonitis .....	3	1	4
Appendicitis.....	2		2
Bright's Disease .....	31	15	46
Other Genito-Urinary Diseases .....	3	2	5
Puerperal Diseases .....	3	1	4
Senile Debility.....	13	2	15
Suicide .....	6		6
Injuries.....	13	14	27
All Other Causes.....	16	5	21
TOTAL.....	333	200	533

Still-born Children—White, 22; colored, 27; total, 49.

Population of City (estimated)—White, 233,000; colored, 84,000; total, 317,000.

Death Rate per 1000 per annum for Month—White, 17.15; colored, 28.57; total, 20.17

## METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure ..... 29.99  
Mean temperature ..... 81.  
Total precipitation..... 5.59 inches.  
Prevailing direction of wind, south.

# *New Orleans Medical and Surgical Journal.*

---

VOL. LVII.

SEPTEMBER, 1904.

No. 3.

---

## Original Article.

---

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints may be had at reasonable rates if a WRITTEN order for the same accompany the paper.]

---

### An Interesting Case of Nephrectomy and Nephrolithotomy.

By G. FRANK LYDSTON, M. D., Chicago, Ill., Professor of Genito-Urinary Surgery and Syphilology, Medical Department, State University of Illinois; Attending Surgeon, St. Mary's and Samaritan Hospitals, etc.

J. C., 50 years of age; referred to me by Dr. A. Oullmann. The patient gave a history of several attacks of nephritic colic at varying intervals extending over a period of some four or five years. Two years before consulting me a tumor had formed in the right flank, supposed to be connected with the kidney. An operation was performed, the character of which I do not know. The patient's description and explanation were very unsatisfactory, although he stated that a pint of fluid of some kind had been evacuated and the kidney explored for stone, which was not found. Drainage was instituted and kept up for several months following the operation. For some weeks prior to my first examination the patient had complained of severe pain in the right side, which was worse at night. During this time he had had constant fever with a distinct evening rise. At the time of my examination the temperature ranged from 100° in the morning to 103½° in the even-

ing. There were occasional chills. The urine was practically normal in amount, but loaded with pus. I found on palpation a tumor of considerable size in the right flank, which extended forward to almost the median line of the abdomen. This was tense, very tender on pressure, and did not present suppuration. Perinephritic abscess was diagnosed, and operation proposed and consented to.

*Operation.*—The usual transverse incision for exposure of the kidney was made, the anterior extremity being curved downward toward the iliac region to about the level of the anterior superior spine. The sac of a large abscess was exposed, which, when opened, gave exit to a large quantity of extremely fetid pus and sabulous matter. There was a distinctly ammoniacal odor conjoined with a peculiar odor characteristic of abscesses in the vicinity of the colon. This latter character of the pus was easily explained by the fact that the cecum and ascending colon supported the inner wall of the abscess. The abscess cavity was loculated, the various compartments containing a considerable quantity of lymph and degenerated tissue mingled with sabulous matter. The kidney was outlined with great difficulty, and was found to constitute the superior loculus of the abscess. The organ was displaced upward and firmly embedded in cicatricial tissue. The kidney proper was so broken down and dilated that it was practically nothing but an abscess sac, the greater portion of which did not exceed a quarter of an inch in thickness. Within what was apparently the pelvis of the kidney were two calculi, one of which was no larger than a pea, while the larger was subsequently found to weigh 75 grains.

The kidney was so thoroughly disorganized that its removal was decided upon. This portion of the operation proved to be very difficult, on account of the extensive adhesions and the abundance of cicatricial tissue. The isolation of the pedicle was found to be especially difficult, and in endeavoring to do so the entire kidney was detached. This, much to my surprise and gratification, was not followed by hemorrhage, the renal vessels, as sometimes occurs, being obliterated by cicatricial deposit. The cavity was generously packed with iodoform gauze around two large drainage tubes.

Recovery was prompt and complete, the wound being healed perfectly at about the end of eight weeks. The urine began to clear up immediately after the operation, and within a few weeks was



apparently perfectly normal. Six months after the operation the patient was apparently perfectly well, and attending to his usual occupation.

---

## Louisiana State Medical Society Proceedings.

[EDITED BY PUBLICATION COMMITTEE.]

I. I. Lemann, M. D., Chairman.

---

### The Importance of Surgical Tuberculosis to the General Practitioner.

By HERMANN B. GESSNER, M. D., of New Orleans, La.

Chairman Section on Surgery.

Having been honored by the Society with the Chairmanship of the Section on General Surgery, it devolves upon me to introduce the subject chosen for discussion, viz: the importance of surgical tuberculosis to the general practitioner. In proceeding to do this it is my purpose literally to introduce the subject, not to attempt a complete discussion of it from all points of view.

Naturally the importance of any pathologic state or disease must depend upon its prevalence and its mortality. The first questions we put ourselves on encountering a new disease are "how often is it encountered?" and "how many of those affected die?" In order to properly establish the relative importance of the disease under consideration I must perforce resort to statistics. This, however, I shall do as briefly as I can without sacrifice of essential points. The figures which I shall give you are from local sources, in fact, exclusively from our Charity Hospital of New Orleans, the practice in which probably reflects accurately that of the general practitioner in Louisiana. Before taking up the prevalence and mortality of the purely surgical tuberculosis, let us glance for a moment at the most prevalent form of tuberculosis, that of the lungs. In Dr. R. Matas' Monograph, "The Surgical Peculiarities of the American Negro," published in the Transactions of the American Surgical Association, 1896, volume xiv, is to be found a series of tables of figures bearing on this subject, giving the prevalence and

fection. Accepting the proposition of Dr. Matas (*op. cit.*) that the vast majority of the cases (in both races) are of tuberculous mortality of the various forms of tuberculosis in the New Orleans Charity Hospital for the years 1884-1893, inclusive. I have prepared a series of tables, similar to those of Dr. Matas, for the years 1894-1903, inclusive, the figures of which for pulmonary tuberculosis, including incipient phthisis, phthisis florida, caseous phthisis, phthisis pulmonalis, chronic pneumonia, caseous pneumonia, incipient, acute, general and miliary tuberculosis, are here given:

Whites, 2,154 cases, 853 deaths; colored, 3,040 cases, 1,346 deaths. Mortality of the disease, whites, 39.6%; colored, 44.2%. Decennial prevalence, whites, 4.24% (42 in 1,000); colored, 9.000% (90 in 1,000). Decennial mortality, whites, 1.68% (17 in 1,000); colored, 3.98% (40 in 1,000).

The greater, actual mortality, decennial prevalence and decennial mortality among the colored people, is noteworthy.

Passing by the medical aspect of the tuberculosis question, we take up the diseases classed as belonging under the head of "Surgical Tuberculosis."

Here we take up tuberculous peritonitis, meningitis, laryngitis, adenitis, scrofulous and strumous glands, tuberculous or cold abscess, lupus and cutaneous tuberculosis, tuberculous ulcer and Pott's disease. The figures show among the whites 277 cases, 24 deaths; colored, 350 cases, 22 deaths, giving for the whites' actual mortality 8.66%, decennial prevalence, 0.54% (54 in 10,000); decennial mortality, 0.047% (47 in 100,000); colored, actual mortality, 9.04%, decennial prevalence, 1.03% (103 in 10,000); decennial mortality, 0.097% (97 in 100,000).

While the number of patients affected with this variety of tuberculosis is much smaller than that on which the pulmonary form has become fastened, yet the proportion is by no means insignificant or negligible, as witness the fact that 54 in 10,000 white patients suffered with such affections, and 103 in 10,000 colored.

It will be noticed that among the conditions classified under surgical tuberculosis no disease of the bones, joints or bursæ are mentioned, these diseases being enumerated in the Charity Hospital reports under the names caries, necrosis, periostitis, synovitis, arthritis, bursitis, without reference to the nature of the specific in-

origin, we shall proceed to analyze the figures on the plan followed before in this paper.

During the decennium 1894-1903 there were enumerated under the head of diseases of the bones, joints and bursæ for the whites 1,211 cases, 38 deaths; colored, 743 cases, 30 deaths, giving for the whites' actual mortality 3.13%, decennial prevalence, 2.38% (24 per 1,000); decennial mortality, 0.074% (7 in 10,000); colored mortality, 4.03%, decennial prevalence, 2.199% (22 per 1,000); mortality, 0.088% (9 in 10,000).

In order to get a full idea of the decennial prevalence and mortality of all possible tuberculous conditions of a surgical character, we shall add the percentages for the two groups of surgical tuberculosis (assuming the diseases of the bones, joints and bursæ to be largely tuberculous).

This addition gives us for the whites, decennial prevalence, 2.92% (29 per 1,000); decennial mortality, 0.121% (12 in 10,000); colored, decennial prevalence, 3.23% (32 per 1,000); decennial mortality, 0.185% (18 in 10,000).\*

I believe the figures given will suffice to impress upon all who have followed them the importance of tuberculosis in general and of surgical tuberculosis in particular to the general practitioner. I shall conclude this presentation of evidence by stating that in Ward 1 of the Charity Hospital, a portion of Dr. R. Matas' service as Professor of Surgery in the Tulane University of Louisiana, there were among 149 surgical cases admitted during the session of 1903-1904 17 cases of tuberculous nature, or 11.4%.

#### COMPARATIVE TABLE.

*Actual mortality, decennial prevalence, decennial mortality of tuberculous affections of all kinds for the periods of 1894-1903 in the Charity Hospital, New Orleans, La.:*

		Pulmonary Tuberculosis		Surgical Tuberculosis		Bones, Joints and Bursæ	
		W%	C%	W%	C%	W%	C%
Actual mortality .....	{ 1884-1893	41.04	58.39	20.18	22.68	2.34	7.99
	{ 1894-1903	39.6	44.2	8.66	9.4	3.13	4.03
Decennial prevalence..	{ 1884-1893	4.78	8.33	0.241	0.504	1.42	1.63
	{ 1894-1903	4.24	9.001	0.54	1.03	2.38	2.199
Decennial mortality....	{ 1884-1893	1.96	4.87	0.049	0.114	0.033	0.130
	{ 1894-1903	1.68	3.98	0.048	0.047	0.074	0.088

\* In compiling these statistics those remaining in the wards at the end of each year were eliminated, only those cases which were discharged or died being considered.

Leaving now the statistical aspect of the question which it has been my duty to put before you, though such reading is, I know, rather dry and apt to become tedious, I wish to devote the short remainder of this paper to dwelling on some points that have struck me as being important.

The etiology and pathology of the diseases under consideration I shall pass by because they have been so thoroughly studied by others that they need no special consideration at this time and place.

It is upon the prompt recognition and radical treatment of tuberculous surgical conditions that I wish to lay special stress.

While the widespread character of the surgical lesion of tuberculosis is becoming better and better understood, it is not every practitioner who realizes, *e. g.*, that inguinal adenitis is frequently tuberculous, attaching no moral stigma to the patient affected by it, and not to be treated by merely poulticing until suppuration shall call for the bistoury.

In surgical teaching stress should be laid on the frequency with which surgical lesions of a tuberculous character are met with involving bones, joints, bursæ, meninges, glands, fasciæ, larynx, pleuræ, mammæ, peritoneum, kidneys, bladder, testes, anus. It is a source of proud pleasure to be able to tell you that nowhere is this done with greater force, persistence and ability than in the clinical lectures of the Professor of Surgery of the Medical Department of the Tulane University of Louisiana, the institution in which this meeting is being held.

An encouraging factor in the handling of these surgical tuberculosis is the fact that a patient may have a marked tuberculous affection of a surgically accessible organ and yet have the surgically inaccessible, or rather, not easily accesible lungs absolutely free from disease. I retain a vivid impression of a necropsy seen some years since, which showed the neck riddled with sinuses leading to tuberculous glands, while the lungs had escaped absolutely unscathed.

Let us, then, be on the lookout for the accessible ravages of Koch's bacillus, spurred on by the strong hope of remedying them before wide dissemination or the involvement of the lungs has made our task one of too great difficulty.

Let no lesion of slow, painless, afebrile character escape minute



investigation from the point of view of the great white plague. The exploring syringe will often with comparative ease and slight danger clear up any doubt that may linger after the application of other diagnostic means.

Now a few remarks about treatment.

Rest, the use of splints, the orthopedic treatment in general of tuberculous cases have proven beyond doubt their value in suitable cases. It is for greater aggressiveness in proper instances that I wish to make a plea.

I have so often seen time lost in aspiration and iodoform injection where radical measures might have done much good that I have grown to look on that method with disfavor except as a palliative in cases suited for no other procedure. During the past year I have been struck with the excellent results obtained by radical measures in three cases, which I shall site in outline.

*Case 1.* Extensive fascial tuberculosis of thigh; iodoform injection after aspiration; reaccumulation of pus, radical excision of sac surrounding abscess cavity, prompt complete recovery.

*Case 2.* Cold abscess over left eyebrow, found to involve frontal bone, which was perforated, and extend to dura. Removal of diseased bone, shaving off of tuberculous patch from dura, application of cautery; exploration of suspicious soft area in brain. Complete recovery. Subsequent attacks on fascial tuberculosis at wrist and on tuberculous cervical glands existing at time of first operation. Recovery.

*Case 3.* Tuberculous spondylitis, lower lumbar. Abscess evacuated on right side. Deep-seated pain on left. Search for abscess, which caused pain by pressure on nerve root. Evacuation. Use of aqueous extract of tubercle bacilli, prepared by Von Ruck of Asheville. Great improvement; patient has gone back to work.

Let it be well understood that the radical measures advocated—for suitable cases only—must be carried out under aseptic conditions. I do not mean by this that members living away from cities must send their cases away for treatment. Boiling water for instruments and ligatures, the portable steam sterilizer for the woven fabrics and rubber gloves, soap and water and brushes for the skin, make the well-educated doctor of the village the equal of the surgical magnate of the metropolis in aseptic possibility, though not in aseptic convenience. Careless and half-way dealings with

tuberculous conditions throw open the door to the bacterial wolves ever seeking whom they may devour.

Let me continue by urging the use in these cases of some specific medication. Here in New Orleans the aqueous extract of tubercle bacilli has been used with excellent results. This and other remedies of the kind, such as Fisch's anti-tuberculous serum, should be thoroughly tested to determine their true merits.

### **X-Ray Therapeutics of Surgical Tuberculosis.**

By J. B. GUTHRIE, M. D., New Orleans.

In considering the subject of the amenability of tuberculous processes to radio-therapy, it is of interest to consider first the data which has been obtained by experimental work, the results of irradiating cultures of tubercle bacilli. Second, the influence of X-rays on susceptible animals inoculated with material containing bacilli. It is generally admitted that there is no appreciable effect upon cultures of tubercle bacilli exposed for long periods of time to the action of this agent. Several observers—Rudis, Jiciusky, Rieche and others—have announced results which seem to differ from the above conclusion; but it is believed that such inhibition of growth as these men report have been due to electrical disturbances set up in the cultures through induction from the excited tube, and that ozone and other products of air decomposition caused the phenomena which were erroneously attributed to the X-rays.

In the case of inoculation tuberculosis the results are diametrically opposed to the above. Lortet and Genoud as long ago as 1896 inoculated eight guinea pigs of the same weight in the inguinal region with an equal quantity of caseous material from the spleen of a guinea pig which had died of general tuberculosis, and, selecting three of these, exposed the area injected to action of X-rays. The pigs which were not exposed all died after the usual period of general tuberculosis, while those which had been treated developed only localized tuberculosis, finally recovering.

Gordon C. Burdick's experiments, conducted along the same line, confirm the above, although he announced in addition an attenuation of virulence as the result of exposing sputa containing bacilli to the action of the rays.

To the above results we can add the histological results obtained

while treating well-demonstrated bacilli containing lesions of the skin.

Grouven excised portions of a lupus lesion from the cheek and made a study of the growth at various times during ten weeks. The tubercles became gradually degenerated and a marked increase in the number of leucocytes, and embryonic connective tissue cells were present, and later a very marked increase in the proportionate amount of adult connective tissue as the tubercles disappeared, healing occurring by a displacement of the tubercles by connective tissue. I have many times observed the cleaning off of the surface of ulcers of various kinds after a few exposures to the X-rays, the usual local antiseptic treatment being purposely omitted for the sake of the demonstration. The response to radio-therapy of acne and pyogenic infection of the hair follicles convinces one that although the X-light is not a germicide *per se*, that upon bacteria in the tissues it does act as destructive agent probably by causing a local leucocytic migration and proliferation of the embryonic fixed tissue cells. It is well demonstrated that in many granulomata there is a marked degeneration of neoplastic cells and a stimulation of normal tissues. Tuberculous lesions are essentially infective granulomata and if these are capable of being destroyed when superficially located it remains for us to perfect our technic in order to bring about the same result in more deeply-seated lesions.

The very first therapeutic application of the X-rays, excepting for depillation, was made in a case of lupus vulgaris. Several hundred cases are on record of successful cases treated in this way and sufficient time has elapsed to prove the permanency of results. The honors in this field are equally divided between the Finsen rays and X-rays, both of them yielding results beyond compare in point of permanency and absence of scarring. It is no longer a debatable question that radio-therapy in some form offers most in combatting this form of tuberculosis. X-ray workers believe their method superior to the Finsen method on account of greater ease of administration, and a greater saving in time. Some cases are not cured by one method and respond to the other and *vice versa*. Again some fail to respond altogether and must be recorded as failures. Unfortunately, too, we cannot tell in advance which

cases will yield to the treatment, which is usually more or less prolonged.

Definite and unique as its field of usefulness is in lupus vulgaris, we find it a most valuable aid in a little more deeply-seated lesions of undeniably tuberculous origin. How often do we find recurrence of tuberculosis in lymphatic glands of the neck after even the most radical of excision methods, and how often do patients present themselves at hospital clinics riddled with sinuses and with large masses of glands, the skin overlying which is itself tuberculous. With the greatest care in operating every gland cannot be removed, and the best efforts of the surgeon are rewarded by sinuses which refuse to heal or by the appearance of glands in the very region which he believed cleared. Enough successful applications of X-rays have been made to warrant their trial in primary cases (before operating) where cosmetic result is important or where sinuses are so extensive as to render operation out of the question.

The following cases illustrate this application of the treatment:

*Case 1.* A white youth, otherwise in good health, with a sinus which up to the time of his being referred to me had existed two months after an operation done by a competent surgeon. Sinus healed after ten treatments and the mass of inflammatory tissue surrounding it was absorbed.

*Case 2.* Young woman, aged 25, who during the four years previous to coming to me had undergone three operations in three successive years for tuberculous glands of the neck. When I first saw her there were two glands on each side just below the mastoid processes. One in front and one behind the sterno-cleido-mastoid muscle. The largest of these glands was about the size of an English walnut and the smallest the size of a pea.

On the left side there was a marked enlargement visible from the front, but too high up to be included in measurement taken with tape measure around the neck. These were bound down. Patient was in addition chlorotic. R. B. C. 5,290,000, W. B. C. 7,000; hemoglobin 50%, color index .471. Heart and lungs normal. Between February 1st, 1904, and April 4th she received thirty-two treatments. During this time the glands diminished markedly in size, becoming freely movable; one of them became no longer palpable and when called North by the illness of one of her family the largest gland was no bigger than the smallest was at the outset.



I have also noted here an absorption in the cicatrices of the previous operations. I am not able to report further progress because for the time being I have lost sight of her, but I believe that a continuation of the treatment will result in a cure.

Among the most pitiful of all surgical patients are those of mixed infection (pyogenic in addition to tuberculous) of spondylitis. I have the record of one such case, a white male aged 24, who had suffered with tuberculous caries of the 5th dorsal and 1st lumbar vertebrae for 4 years previous to admission to the hospital.

Several operations had been done previously and cicatrices were in evidence where previously sinuses had been enlarged and curetted. Five sinuses remained in left loin. At time of admission urine contained 10% of albumen, hyaline, granular, and waxy casts. Patient was very anemic and was generally edematous. Any further surgical measures being out of the question, I put him on X-ray treatment and after six treatments, the sinuses healed and patient's general condition improved. Urine cleared up somewhat, and patient believing himself well on road to recovery went home.

No less man than J. B. Murphy, of Chicago, reports cases of tuberculous synovitis of knee which recovered with perfect functional result under X-ray treatment. In the same communication, he cites 3 cases of tuberculous spondylitis, one of which reports with your permission, I shall read:

"The patient, aged 36, a farmer, was lifting a hog from a sling when he suddenly felt a pain at about the fifth dorsal vertebra. The pain gradually increased in severity, although he was able to be about for a week. I saw him 38 days after the accident, as he called it. He said that he did not fall down when he had the pain, nor did he drop the hog, but he carried it to the place in which he had originally intended it to be. When I first saw him he had a beginning paraplegia from the point of the injury down. I could not believe that a tuberculosis of the spine originating in an adult could advance with such rapidity as to produce a granuloma sufficiently large to compress his cord in that short period of time. Consequently I made a diagnosis of sarcoma. Besides we know that an osteo-sarcoma following trauma can develop with that rapidity.

"With a large hypodermic needle I made a lateral puncture in between the ribs, through into the pleural cavity and into the body of the vertebra, and succeeded in getting a drop of pus and

tubercular debris. Dr. John Deaver, of Philadelphia, who was in Chicago at the time, saw the case with me and confirmed the diagnosis. The next question was, what could we do for that man other than to do a laminectomy to stop his rapidly advancing paraplegia? After a thorough consideration of the subject I decided to put him on the X-ray treatment. The first few days after its application his paraplegia continued to get worse. After the third application of the ray his pain disappeared, and after twenty-five applications his paraplegia had entirely disappeared and he was able to go home, and to show you how thoroughly it disappeared, he went hunting, shot chickens and incidentally shot off a part of his foot. I used the X-ray to hasten the healing of his foot."

Other X-ray workers have confirmed these observations.

Abdominal tuberculosis experimental data negative, Ausset and Bédart (1899), 2 cases cured.

### **Surgical Tuberculosis from an Orthopedic Standpoint.**

By E. J. HUHNER, M. D., New Orleans.

It is manifestly impossible, in a paper of this sort to consider each point separately and, therefore, I will confine myself to a discussion of the treatment of tuberculosis of the hip and vertebræ. There is no question but that these conditions properly belong in the domain of orthopedic surgery inasmuch as it is invariably necessary at some time, to employ splints or braces. During the period between the years 1869 and 1893, at the Childrens' Hospital of Boston (1), 3868 cases of bone and joint tuberculous were seen and treated. Of this number 1402 were hip-joint disease, and 1964 Pott's disease. Tuberculous arthritis and osteitis most often affects children, the greatest number of cases occurring between the ages of three and ten. Occasionally hip disease and spondylitis are associated in the same patient. This is illustrated in the following case:

I. white male, aged 12. First seen August 3d, 1902. When he was four years old he developed Pott's disease in the upper dorsal vertebræ. This was treated by means of plaster jackets, but he was left with a marked kyphos. About January, 1902, a limp was noticed and throughout the night he frequently cried, but as he did not awaken, these cries were attributed to dreams. His relatives were not alarmed until July, when a swelling of the right hip-



Dr. Hühner's Case of Hip-Joint Disease.





joint was noticed. There was much tension, and rupture seemed imminent. August 11th, a free incision was made into the joint which was curetted, cleaned and drained. In November a traction splint with abduction screw and ratchet and key extension was applied. In March of this year the abscess had healed entirely, all acute symptoms has subsided, motion was almost perfect, but he was ordered to retain the splint.

Hip disease tends to a spontaneous recovery with shortening and deformity in the majority of cases. Whitman (2) says there are "many cases in which the primary focus in the head of the bone is so limited in extent, that perfect functional cure may result under any form of treatment, or non-treatment even."

John H., white male, aged 10 $\frac{1}{4}$ . First seen February 8, 1903. When he was eleven days old his mother noticed that the right knee-joint was swollen and inflamed. This shortly disappeared. The right hip-joint then became painful. Subsequently abscesses formed and ruptured. Sinuses remained for a number of years. Examination showed the femoral head, the trochanter in normal positions and fifteen degrees motion. There is six inches actual shortening, and considerable scoliosis. An X-ray examination was refused. [See photographs].

The treatment of hip-joint disease is mechanical or surgical. The mechanical method implies either recumbency with traction, or traction alone or fixation. Buck extension is best applied after surgical procedure, and until a splint can be ordered, or in those who cannot afford apparatus.

Fixation without extension is only to be recommended where the symptoms are not acute, and as a temporary measure, as it will not prevent osseous destruction. The ideal non-surgical treatment of hip-joint disease is extension and counter-extension, which ensures rest to the inflamed joint. This is best secured by the use of one of the many traction hip splints. To secure extension the upright is lengthened by a ratchet and key, or a windlass attachment. A screw attached to the pelvic band is needed to overcome adduction and abduction. All these features are embodied in both the Phelps and Taylor splints.

The surgical measures are principally: Aspiration of the joint. Incision, erosion and drainage and excision.

In acute cases where the capsule is greatly distended, aspira-

tion affords immediate relief. Rest and extension should be employed after the operation. Incision, erasion and drainage was recommended by De Forest Willard (3), in cases where caseation had occurred. An incision is made over the abscess, the wound irrigated with a hot 1 to 1000 bichlorid solution, and with a sharp spoon the diseased tissue is removed. As after treatment fixation and extension should be made. This operation is preferable when the patient is a child. Excision is required when all the diseased area cannot be removed by erasion. In all operations on the joints, Young (4) insists upon the "preservation of the body-heat, and rapidity of operation." He employs an electric mattress, which prevents loss of heat, and which prevents or diminishes shock. Deformity and abscesses call for special treatment. If the abscesses are small, local applications will often cause them to disappear, but if they are large, immediate incision should be made, and if necessary, an erasion or excision done. The cavity is then cleansed with bichlorid solution, filled with 5% iodoform emulsion or balsam of Peru, and thoroughly drained. To relieve deformity, we have recourse to myotomy and tenotomy, forcible correction and osteotomy. Myotomy and tenotomy are employed in cases of fibrous ankylosis. Usually the tensor vaginæ femoris, the fascia lata, rectus femoris, and the adductors will require division. The deformity is corrected and put up in plaster of Paris. Forcible correction is not advisable until the disease has entirely subsided. This operation was strongly advocated by Lorenz before the Orthopedic Section of the Academy of Medicine, and by Jones (5), of Liverpool, who writes, in his practice "it has always been the custom to rectify with varying degrees of force, any tubercular joint in wrong position" \* \* \* and he has "never waited for recovery to take place from the tubercular condition, but \* \* \* looked upon the acute stage as the most appropriate for reduction." Steele reported a case operated by Lorenz in which the disease returned, and in a few weeks the patient died of tubercular meningitis. Gibney (6) and Young (7) consider it a dangerous procedure during the active course of the disease. In osseous ankylosis, osteotomy is resorted to—Gants subtrochanteric operation being the operation of choice, and giving the most satisfactory results. Pott's disease is more confidently treated now than ever before. Recumbency should only be insisted upon during the acute

stage, and the patient so placed that he can get an abundance of sunlight and fresh air. A head extension apparatus should be applied. Suspension is only employed temporarily during the application of fixation appliances. It must never be used to correct the resulting deformity, because of the danger of paraplegia or death. The apparatus we employ in the treatment of Pott's disease is either jackets of plaster of Paris, silicate of soda, leather, felt, wood, paper, etc., or spine braces. The braces are preferable, because they are easily removed, adjustable and cleaner though more expensive than the jackets. Only one who is experienced in mechanics and anatomy, should order the brace, and the measurements for it taken by the surgeon, or under his supervision. A head support is necessary where the vertebræ above the 7th dorsal are affected. It should firmly fix the head. The spine brace acts as a lever; the kyphosis being pressed forward, and the part above pulled backward. Of all the numerous braces for the treatment of spondylitis, the best are Taylor's antero-posterior spinal support, and Goldthwait's modification of it. The brace should be worn day and night. Iliac, psoas and lumbar abscesses are grave complications. When large they should be fully opened and drained. Paraplegia is usually caused by external pachymeningitis or edema. For its treatment support of the spine and recumbency are requisite. Laminectomy is not to be recommended, except in extreme cases and after the paraplegia has resisted all other means. It is frequently unsuccessful, as "out of 12 operations recorded by Young (8) 4 have been unsuccessful." Willard (9) condemns it because: "It endangers life . . . it is uncertain in its relief . . . it weakens the only support of the head and shoulders." More or less deformity remains after recovery from tubercular spondylitis. By efficient treatment this deformity may be prevented; after it is once established it is possible, in some cases, to correct it. In 1895 Chipault and in 1896 Calot reported cases of kyphosis resulting from Pott's disease that were forcibly corrected. Their results were so gratifying that others have taken it up and it is now regarded as the ideal method for the treatment of this deformity. It should never be resorted to during the active stage. When the disease is very old an anesthesia is necessary. Frequently the existing symptoms are immediately relieved when the faulty position of the spine is corrected and paralysis will

gradually disappear. Goldthwait (10) has devised an apparatus which facilitates the operation and the subsequent application of plaster of Paris.

B. T., white female aged 9, had a marked deformity in the mid-dorsal region. No acute symptoms present. March 1903, under anesthesia, I forcibly corrected the deformity by manual pressure and applied plaster of Paris. Three weeks later the plaster was removed and it was seen the kyphosis had almost entirely disappeared. The plaster was replaced and continued for 4 months. The ultimate result was excellent.

In bone and joint tuberculosis let us not forget the value of improved hygiene and good wholesome food and plenty of it. Tonics are needed often and sunlight always.

#### BIBLIOGRAPHY.

1. Medical and Surgical Report of the Children's Hospital, Boston, Mass.
2. Whitman, Orthopedic Surgery.
3. DeForest Willard, Trans. Am. Ortho. Assn., Vol. II.
4. Young, *Therapeutic Gazette*, June, 1902.
5. Jones, Trans. Am. Ortho. Assn., Vol. XI.
6. Gibney, *Am. Journ. of Ortho. Surg.*, Aug. 1903.
7. Young, Orthopedic Surgery.
8. *Ibid.*
9. Trans. College of Physicians, March 6, 1889.
10. Goldthwait, Trans. Am. Ortho. Assn., Vol. XI.

#### DISCUSSION OF THREE PRECEDING PAPERS.

DR. J. F. OECHSNER, of New Orleans: This subject is extremely important and one in which probably every member of this Society has had more or less experience. I regret very much not having heard all of Dr. Gessner's paper.

In regard to Dr. Guthrie's paper while I am fully aware of the efficacy of the X-ray in various conditions, and refrain from saying anything derogatory to that method, yet I throw out as a hint, that we are liable to become faddists. In a paper read before the American Medical Association, Dr. De Forest Willard arrived at the conclusion that sunlight after all, if properly and adequately applied answered every purpose of artificial light in certain cases. While



the results in Dr. Guthrie's case show the undoubted value of the X-ray, I must, nevertheless, venture the suggestion that probably the disease was not entirely removed by the surgeon at the time of the operation. These operations must be thorough and every vestige of the disease must be removed in order to prevent recurrence. Recurrence in tuberculous adenitis, particularly where there is no mixed infection should not occur if all of the glands have been thoroughly removed. One essential is the extreme importance of an early diagnosis of surgical tuberculosis, particularly of bones and joints. How many make a diagnosis of Pott's disease before deformity? How many see these cases before the deformity occurs and then the disease is already rapidly progressing? How many see cases of true tuberculosis of the hip joint early? The points with which we should familiarize ourselves are those which will give us symptoms of early infection of the joint. In Pott's disease we should not wait for the development of the deformity but two cardinal points should be taken into consideration, first the decided rigidity of the spinal column, second the typical night cry. The same holds good with cases of hip joint disease; upon movement there will be found a certain, frequently very slight, fixation at the hip producing the typical tilting of the pelvis. This associated with some pain upon movement, a slight lameness, the night cry and some slight elevation of temperature should attract our attention. These cases should not be treated in a dilatory manner and the patient should be given the benefit of the doubt. Even if tuberculous disease is not present it were better to adopt treatment in negative cases than to neglect it in positive ones—no harm is done. The important point in treatment is rest—absolute rest; everything else, in view of our present undeveloped serum therapy is accessory. Of course the tuberculous focus should be removed if possible to do so without jeopardizing the life or physical integrity of our patient. This brings me to the statement of a physician in Iowa, I believe, who advises radical measures—incision of the joint, evacuation of the pus, and excision and even amputation where only a small focus is made out; I can not subscribe to this teaching. Absolute rest is accomplished principally by a plaster of Paris bandage. The older I get in practice and the more I see of these cases the more am I convinced that plaster of Paris is the ideal splint. Other splints will get out of order and then they become really a means of aggravating

rather than curing the disease. I have made it a practice in my clinic to use plaster altogether and while I do not advise discarding splints entirely still I am using them less. In Pott's disease the plaster should not be a belt around the waist merely, but should maintain pressure and extend well under the axillæ and well over the hips, so as to maintain extension, therefore, if the plaster fails we must not always attribute it to the material, but see if it has been properly applied. In addition to the plaster the treatment is that which has been followed in all tuberculous conditions—sunlight, fresh air, systematic and well-regulated exercise, etc. I have had no experience with the watery extract of tubercle bacilli, but have been tempted to make experiments. In my remarks relative to drastic measures I do not mean to condemn them in appropriate cases, but I do say that we will accomplish more good by seeking and making an early diagnosis, which will permit of a more conservative method of treatment.

DR. E. D. MARTIN, of New Orleans: One point is in regard to the importance of early diagnosis. We are most apt to recognize cases of Pott's disease and spondylitis on account of complaint and the child's gait and possibly it is a more distinct disease. You may recall cases where a diagnosis of rheumatism has been made instead of myelitis but wherever you can elicit a history of trauma it is best to be guarded in your diagnosis. It is usual in tuberculous subjects for trauma to lead to the trouble and the inflammatory condition which follows forms a nidus. It has been my good fortune, or misfortune, to have had an extensive experience in these cases of osteomyelitis. I suppose I have operated upon 200 cases and it was in the beginning through errors of my own that my attention was called to the importance of an early diagnosis. I recall one case where I was able to make the diagnosis one week after the infection of the bone and the child made a perfect recovery.

I was much pleased in listening to Dr. Guthrie's paper, though I have had no experience in treating with the X-ray. There have been good results no doubt, but I know positively that there have been bad results, so that I believe that if we find no benefit following the X-ray we should resort to the knife. If once there is breaking down of the glands I do not believe we can expect results from the X-ray. The only way is to extirpate, and most remarkable to me is it to see how perfectly immune these patients seem to be to further infection.

DR. W. J. DUREL, of New Orleans: I have been using the watery extract of tubercle bacilli for the past year, and have under observation a case of caries of the rib. The case has been operated upon twice, and the extract has been used for eight months, with splendid results. We are too hasty in looking for good results. We should give the extract time for it is a question of continuous treatment. I have seen several cases of surgical tuberculosis that have markedly improved under the use of the watery extract of tubercle bacilli. I think Dr. Gessner has brought up quite an important subject, which is over-looked too often by most men. I have had here, in this town, quite a difficult time in promoting the use of the watery extract. I am glad to see that it is coming into use, and I believe good results can be obtained from its use. Dr. Gessner's remarks on the hygienic treatment of tuberculous affections are important. The watery extract T. B. will not do all. By fresh air, I mean that the patient should be in the open air most of the time—if not all the time. I have some patients who now are sleeping on their porches. Rest also is an important factor. Rest in the open air, and in the horizontal posture, and in a place free from dust.

Forced alimentation is another valuable factor, especially the use of fresh laid eggs, and milk (from 10 to 14 eggs, and 1 to 1½ quarts milk, besides three regular meals). I prefer the use of the watery extract to other "culture products," because I have used it on myself, and I have seen its manufacture. I think it is safer and less dangerous than the other "tuberculins."

DR. A. C. EUSTIS, of New Orleans: I want to add my one case in which I used the watery extract. The patient was a white boy, ten years of age who had tubercular spondylitis. He had had a plaster cast on for several months and had drifted from one physician to another and finally came to Dr. Matas, who incised a large psoas abscess. Dr. Matas ordered a Taylor brace for his spine and turned the case over to me. He improved for a short while only for the sinus left by incision of the abscess continued to suppurate, discharging typical tubercular fluid and shortly he developed a dry cough with night sweats, and with evening temperature of from 103 to 104 degrees. Examination revealed unmistakeable signs of a small area of consolidation in the apex of the right lung. All hygienic and medical measures known to us were tried but he was getting progressively worse. At Dr. Matas' suggestion I put him on the



watery extract, starting with the one tenth of a cubic centimeter of the No. 1 solution, by needle. In two months he was a different boy, the fever had entirely disappeared, the sinus had closed, and he had gained greatly in weight, and what is more all signs of involvement of the lung had cleared up. To-day he is running around and is playing baseball but he still wears the brace. One point, though, is that I was never able to find the tubercle bacilli in his sputum, but his cough never went beyond the dry hacking cough found in these patients, and I am positive that there was tubercular involvement of the lung; and furthermore, I feel that he owes his recovery to the watery extract.

DR. A. JACOBY, of New Orleans: I believe Dr. Guthrie will agree with me in the opinion that we should first excise the mass of glands and then resort to the X-ray treatment. I had a case for quite a while that had been operated upon by Dr. Gessner, with tubercular glands extending from the mastoid to the clavicle on both sides; one mass began to suppurate and required dressing once or twice daily. I tried all sorts of dressings without relief and then began X-ray applications two or three times a week, exposing for 20 minutes, and the sinus closed up and the glands became smaller. He left the clinic and I was unable to follow the case, but he had been greatly benefitted. The involvement was too extensive and the condition of the patient so bad that it was impossible to consider a second operation.

DR. GUTHRIE, in closing: When I undertook to write this paper it occurred to me that it might be interesting to present the X-ray side of tuberculosis; but I do not intend to say that all cases should be treated with the X-ray and I stated in the paper that there are cases where you can not use it but where you want cosmetic effect as in the case of a young lady who will want to wear a low neck dress it is worth while to try the X-ray, and in such cases as described by Dr. Jacoby of recurrence in the glands you can fall back upon the X-ray with prospect of success. I do not maintain that it is a treatment of absolute certainty but simply that it is one well adapted to certain cases.

DR. E. D. MARTIN, of New Orleans: I believe that wherever a case has been operated on and the X-ray treatment has to be given afterwards, the operation was not thorough in the first place.

DR. E. J. HUHNER, in closing: That rheumatism is often diagnosed in cases of joint tuberculosis is no doubt a fact. The case of



which I have shown the photographs was originally diagnosed rheumatism. I do not agree with Dr. Oechsner that plaster of Paris is most applicable to all cases of tuberculosis of the joints for if we apply plaster to a case of hip joint disease it stands to reason that we can not maintain extension. If we apply a plaster jacket to a case of Pott's disease that jacket will become loose in the course of a week or two and pressing on the deformity it is liable to produce an excoriation, it irritates the skin and presses upon the spinal processes, yet it must be left on for some time to do any good. If we apply a Taylor or Goldthwait brace or a hip splint we have an apparatus that is lighter than plaster, is removable, and in the hands of one who knows the brace it is easily adjusted to the needs of the growing child and will overcome the deformity in most cases. I do not mean to decry plaster altogether. In some cases it is good but in most cases the splint and braces are better.

---

## Society Proceedings.

---

### Orleans Parish Medical Society.

---

*President*, DR. M. J. MAGRUDER.

*Secretary*, DR. S. M. D. CLARK

163 University Place, New Orleans.

In charge of the Publication Committee, DR. S. M. D. CLARK, Chairman,  
DRS. E. J. HUHNER and M. M. LOWE.

---

MEETING OF JULY 9, 1904.

DR. MAGRUDER, President, in the Chair.

DR. McGEHEE, SR., read a paper entitled

#### **An Unusual Case of Meningitis.**

HISTORY.—Was called on June 8 to attend a child 18 months whom I had never been called to treat since I cut the umbilical cord. Well developed, bright. Family history good. Parents young and vigorous. Has an older brother and sister who are strong and well. I found the boy on his mother's lap lying comfortable on his back, sleeping; could be aroused but would promptly go back to sleep.

Said to have been in this drowsy condition for two days, prior to which he was restless for several nights.

Reflexes, sensation and motion seemed normal. No history of fall or eruption disease or nose or ear affection was given.

**SYMPTOMS.**—Prior to my first visit, indistinct premonitory symptoms were present for two weeks, attributed to teething. The symptoms most constant, loss of appetite, weariness and fretfulness; wanted to be left alone, sleep was disturbed, tosses about and sometimes starts and cries out.

He was unsteady on his feet, yet it was not until the 8th appreciable brain symptoms made their appearance, without any warning; then a physician was called. The first symptoms noticed which indicated affection of the encephalon was somnolence; natural expression of face; pupils uniform and complained of light; could be amused but would quickly fall asleep again. He resembled a child who had taken too much alcohol. Vomiting had been noticed by friends before this date. Constipation present for a few days but was easily overcome.

**DIAGNOSIS.**—For first two or three days was held in abeyance; child, with normal temperature, pulse and respiration, excretion and facial expression; somnolence; the only symptom, sleeping too much; yet could be aroused. He took nourishment which was assimilated, and would go to sleep again. We were uncertain as to cause, hoping the cerebral symptoms were not due to actual disease of these centers but to some reflex irritation.

Alimentary canal was cleaned out. Adhesion of prepuce broken up, and the gums were cut, where swollen and tender, as dentition was active, with hope of excentric cause.

The patient was cinchonized for two days as malaria so insidiously affects in protean form the young. In one block of this home were the only two cases of pernicious malaria I have seen which originated in this city. So I felt justified in administering quinin on the principle "When in doubt lead trumps." It had no effect upon the patient.

Stomach retained everything and bowels moved spontaneously every day.

The right leg was stiff and there was some spasm of the adduction which could be overcome. The leg moved involuntarily as follows: It was adducted and slightly flexed at the hip, slightly flexed at the knee; the foot was extended and slightly adducted. These

motions were sudden and occurred with no regularity. Tache cerebrale was present.

The eye muscle showed no abnormality, the face was slightly drawn to the left. The sensation could not be tested.

The reflexes were all increased, more so the right than the left side. There was ankle clonus on the right side only. Babniski's sign was present on both sides. This was to be expected from the age of the child. Koenig's sign was well marked. Lumbar puncture owing to the condition of the child was not considered justifiable.

On the ninth day I had the benefit of Dr. Roy M. Van Wart's counsel. He concurred with me in diagnosis and treatment. The following observation was made. June 17, the patient a child of 18 months assumed the dorsal decubitus. There were no deformities. The child was unable to speak and made no sound beyond the rattling of mucus in the throat. The pupils were widely dilated and reacted to light. There was a moderate degree of optic neuritis. The veins were dilated and tortuous and the disc showed some congestion. There was no abnormality in the muscles of the face. The hands were tightly closed but could be opened with some difficulty. There were localized convulsions involving the right hand and arm. The face was not involved at the time of the examination.

No gesture or facial expression indicated headache. *He was absolutely speechless on the 8th, when first seen.* Never made a sound with vocal cords.

Muscles of neck not persistently contracted, those of back and abdomen were contracted giving the "boat" shaped retraction.

Slight paralysis of ocular muscles causing irregularity of pupils was manifested; the right being larger for days.

No elevation of temperature until on the 12th. As the case progressed reflexes very exaggerated and hyperesthesia of surface of body was noticed. Intolerance of light and sound showed further sensory disturbance. There was no delirium. Expression of eyes always natural. Clonic contraction of muscles of thigh, leg, and arm of right side. The feet, toes, legs and knees were the first parts affected. These continued to be affected throughout the entire attack. Later the elbow, wrists and fingers had tonic or clonic contraction. The face, tongue and throat were never affected. Par-

tial hemiplegia of left side; lasted for days. Showing conclusively by cerebral localization that the miliary tubercles were deposited in the superior portion of the posterior central convolutions and in the inferior frontal convolutions. The numerous authorities consulted were: Star, in American Text Book of Disease of Children; Roch, Pediatrics; Smith's Diseases of Children; Osler, Practice of Medicine; Holt, on Infancy and Childhood; and the text books of Wood, Mills, Danner, and Tyson. All hold that this is an unusual locality for the disease to manifest itself.

The ophthalmoscope revealed a congestion of blood vessels and edema of optic disks, possible optic neuritis but not tubercles of choroid.

Pulse was slow and full during early stages, but subject to rapid variation during muscular exertion, as shown by chart. No temperature until 12th, and then very inconstant; does not conform to any type, septic or malarial. Skin usually moist; no sweats as usually associated with other forms of phthisis.

There would be occasionally remission of grave symptoms. Convulsive spasms and even contraction of muscles of right side would cease, leaving *friends* of patient to hope for a favorable termination.

Respiration, generally normal; contraction of abdominal muscle caused it to be more thoracic.

Urine was normal in quantity and quality.

Record on 13th by intelligent friends who kept faithful watch. "Had control of right arm, and put bottle to mouth when handed him to-day. The first voluntary movement noticed in five days. Expression natural, voice and light do not disturb him to-day."

Emaciation was not rapid; muscles were firm; though little nourishment was taken last ten days. The fontanelles were distended constantly showing congested condition of encephalon.

Convulsive spasms came more severe and frequent; finally followed by general relaxation of muscular system, making less apparent the isolated paralysis.

END.—Every form of sensibility was completely abolished; pupils uniform and partially dilated. Without a sound or contraction he died on 12th day. Course of T. M. is very variable, from rapid, five or six days, to slow, 60 days. Invasion slow and insidious.



**PATHOLOGY.**—The bacillus which causes the pathological changes of T. M. is first located in some other part of body. Babes investigated 12 cases. "Found tuberculous lesions of the mediastinal ganglia in all and also pulmonary lesions of the same nature."

The growth generally of miliary tubercles chiefly in meshes of the pia mater, along course of blood vessels at base of brain, hence called basilar meningitis, especially in the choroid plexus, results of the irritation is exudation which causes pressure on convexity of brain and in ventricles. Symptoms vary with location of tubercles.

Autopsies show in apex of lung cheesy nodules, or more frequently bronchial glands were site of primary infection.

**LOCATION.**—(Gray) The favorite resting place of the affection is in that portion of the pia which extends over the olfactory, the optic and the third nerve as well as the crura cerebri. In American Text Book of Diseases of Children, the same writer states "in children the pia mater at *base* of cerebrum is alone affected.

In case under consideration along fissure of Sylvius and over cortical portion of the inferior or third frontal lobe and upper portion, *central* both posterior and anterior, involving speech center and motor centers of leg, foot, knee, and fingers.

Treatment consisted in making child comfortable; nourishment, ice to head to reduce temperature. Bromide Pot. 5 gr., Chloral Hydrate 5 gr., per rectum, to relieve spasms when necessary, for the diagnosis carried with it the hopeless prognosis.

In the light of recent pathology we must not conclude that this disease was the result of an inherited diathesis, but an infection.

Every child should be protected by every possible way against tuberculous infection whether by food or human beings. The nurse who has pulmonary tuberculosis was especially fond of the little patient. She kept him in her lap a great deal, and frequently kissed him on the mouth. It is no mere co-incidence, the fact that an active, well-developed child without history of hereditary tuberculosis lives in close connection with a tuberculous adult and dies of the disease; it is significant, and should warn parents.

The practical suggestions from this report, viz:

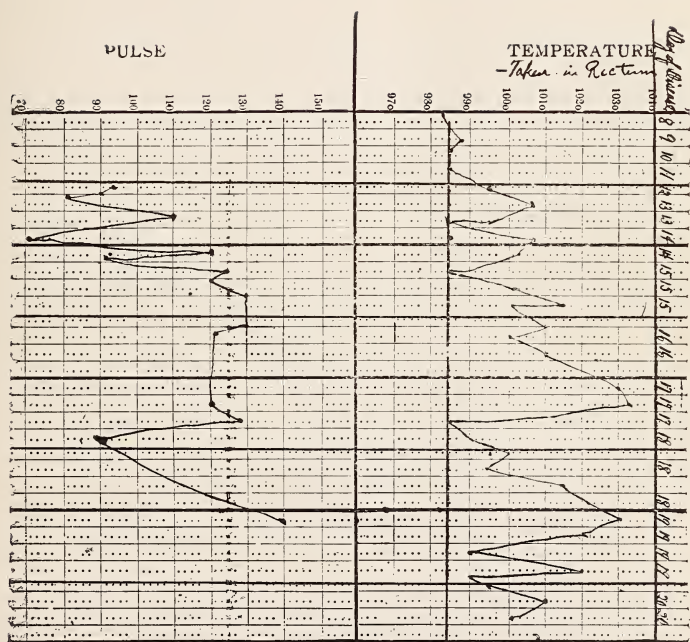
- 1st. The unusual location of the disease.
- 2d. The difficulty of an early diagnosis.
- 3d. Importance of having a sound, healthful individual for a nurse.

## DISCUSSION.

DR. WEIS pointed out that the bronchial glands and lungs were not the only location of tubercular infection from which other parts of the body could readily become infected, but that the researches of Behring had shown that the intestinal tract of infants and children, through its unprotected mucous membrane, and the tonsils, were a fertile source from which tubercular infection might develop.

DR. LEMANN said that it was interesting to note that tubercular processes frequently exist in parts of the body when the lungs and intestines, the sites of predilection, were entirely free from invasion. He had recently seen at operation two cases of tuberculous peritonitis involving the ovaries, and in both cases there was no tuberculous pulmonary nor intestinal lesion.

DR. VAN WART said that the case of meningitis reported by Dr. McGehee was one of great interest from the standpoint of the early onset of aphasia. This was a symptom which was easily understood when the anatomical lesions found were considered. Anything interfering with the speech center would produce this. Local tuberculous exudates and local edema pressing on this center as well as a blocking of the artery of supply and a secondary softening and a local encephalitis had been recorded as causes. Care should be taken in distinguishing speech disturbances due to local paralysis of the muscles involved in producing speech which would also produce inability to produce articulate sounds, but inarticulate noises could still be produced. The ordinary text books and many of the special ones make no mention of this symptom, which is considered by some authors as rather frequent. Pathologically speaking tuberculous meningitis could be divided into those cases in which the dura alone was involved and those in which the pia showed the greatest deposit. The former cases were unusually circumscribed and secondary in bone disease or to the so-called solitary tubercles. They were amenable to surgical treatment. The cases in which the pia showed the greatest involvement were the commonest and were usually diffuse. These cases when they involved the meninges at the base of the brain were known as basilar meningitis. This was the commonest text book term, but careful examination revealed the fact that the process not







infrequently involved the vertex, as in this case. Lumbar puncture was a valuable aid to diagnosis. Tubercle bacilli had been noted as occurring in the deposit obtained from centrifugalizing the fluid withdrawn. This was uncertain, and the character of the cells present could be used to more advantage as a diagnostic aid. In the epidemic cerebro-spinal meningitis and in pyogenic forms polymorphonuclear forms predominate, whereas in the tuberculous form lymphocytes formed the largest proportion of the cells present. (A diagram showing the speech centers and the location of the motor areas, as delineated recently by Sherrington and Grumbaum, was shown.)

DR. POTHIER recalled a case that he had observed in the Charity Hospital which went towards corroborating the statement that tuberculous processes could exist primarily in organs other than those of their favorite location. The patient, a colored male, was an inmate of a surgical ward, being there for some venereal condition. The man was walking in the ward, when he dropped dead. On autopsy nothing was found in his abdomen and thoracic organs. On opening the skull it was discovered that the odontoid process was necrosed and broken, causing instant death. The necrosis was due to tuberculous infection.

DR. FEINGOLD spoke of the importance of the adenoid tissue as an important focus for tubercular infection, calling attention to the importance of the tonsils in children as being a potent avenue through which tubercular infection frequently occurred.

DR. MCGEEHEE, in closing the discussion, stated that he was obliged to the members for the discussion of his paper. Spinal puncture as a medium of diagnosis could not be relied upon, because the absence of the tubercle bacilli did not prove that the infection did not exist, and besides spinal puncture was not free from an element of danger. Dr. Pothier's case of odontoid necrosis recalled to his memory the case of a young lady of apparently vigorous health who died suddenly from necrosis of the cervical vertebra.

DR. BLUM read a paper entitled

**"Ainhum; Report of a Case."**

(Paper not furnished in time for publication; will appear in annual volume of Transactions of the Society.)

## DISCUSSION.

DR. WEIS said he had made the pathologic examination of the excised portion of the toe, which, unfortunately was the distal end. The epidermis showed hypertrophy of all the strata. The cutis propria was formed of thick, closely placed bundles of fibres and a network of delicate elastic tissue, through which dilated blood vessels ran. As a whole the appearance was one of a chronic inflammation limited to the cutis vera and the vicinity of the epidermis. The shrunken bone (of the last phalanx) showed a rarefying osteitis and infiltration of white cells and some fatty infiltration. There was no evidence of the condition of lipomatous change found by Le Dantec. Dr. Weis agreed with Madeira that ainhum is an hypertrophy of the skin, *i. e.*, a primary scleroderma, with a resulting chronic congestion and hypertrophy by the interference of circulation through the constricting ring. Examination for bacteria was negative. Stains for leprosy and tubercle bacilli showed neither organism.

DR. GESSNER said that he had heard no mention of a case reported by Dr. Joseph Jones, of this city, in his "Memoirs," the case being credited to Dr. A. C. Love, of Louisiana. Dr. Gessner had seen three cases of ainhum in his ward in the Charity Hospital during the past eight years. He has one case under observation at present, a case of unilateral ainhum, in which the little toe had dropped off, leaving a neat, smooth stump.

DR. BLUM, in closing, said that Dr. H. P. Jones had told him that his father had reported some cases of ainhum, but that he had been unable to find them.

DR. JACOBY read a paper entitled

### The Treatment of Tetanus.

In dealing with this subject, the writer does not claim any originality, but only hopes that some of the statements and conclusions deduced from the review of the subject may influence a few to a trial of the method which now seems most in vogue and most successful in its results. Nor is it his intention to go deeply into the pathology of the subject, except in so far as it concerns the treatment of this dreadful infection. Before entering into the methods

of treatment, let us now consider the pathological condition and the infection which exists after the toxins are generated.

It is accepted that the toxins are liberated *in loco* or in the wound by the germ, and that these toxins then enter into the general circulation, but not the tetanic germ. The toxins are absorbed by the cells of the spinal cord, which they apparently can only reach through the motor nerves, which it enters through the terminal muscle-end apparatus. They seem to have a special affinity for the anterior gray horns, and this combination, probably chemical in its nature, between the toxins and the cells is so strong that the anti-toxin may not be able to overcome it. It is for this reason, especially, that we should give the anti-toxin early and in very large amounts, so that in the one case the combination may not be too powerful to be overcome, while, on the other hand, the large amount used may be sufficient to break up the chemical combination. This fact has led to the introduction of the anti-toxin directly into the spinal canal, so that its effects could be localized and direct results be effected. The toxin does not diffuse itself from above downward, the anti-toxin pursuing the same course, which also suggests the effective means of using it.

There are five methods of treatment: 1. Medicinal. 2. The Baccelli treatment. 3. The anti-toxin (a) subcutaneous, (b) intravenous, (c) intracerebral, (d) intraspinal, (e) intraneural, combined with the intraspinal. 4. Injection of an emulsion of the normal brain tissue. 5. The removal of some of the spinal fluid and its replacement with normal salt solution, or the injection of the normal salt solution subcutaneously and intravenously.

It must be understood that the essential requirements in all the treatments are absolute quiet, controlling of the nervous system and good nursing. Nor must we forget that in every case the wound of entrance, if it can be located, must be thoroughly incised, washed with peroxide, strong permanganate of potash solution, then swabbed with carbolic acid and alcohol, after which it should be packed and a bichloride dressing, 1-3000, applied. One must consider also that all reports of cures by any treatment must be judged from the standpoint whether they were of the acute, subacute, or chronic variety. The acute variety is one depending upon an incubation of less than fifteen days, the subacute less than three weeks, and the chronic variety after the third week.

The medicinal treatment which has now been partially abandoned, except when used in conjunction with the surgical treatment to control the nervous symptoms, has consisted of chloroform inhalations whenever the convulsions would manifest themselves, calabar bean, hyoscin, morphin, the bromides, chloral, curare, amyl nitrite, cannabis indica. Of all these we hear of the bromide and chloral treatment, used very staunchly at our Charity Hospital, the morphin, and the calabar bean. The bromides and chloral are given in very large doses, especially the latter, in some instances from 100 to 200 grains a day being given. Morphin has been used in  $\frac{1}{8}$  gr. doses every hour or two until the convulsions are controlled, the same method being followed in the use of chloroform. None of these can be considered as rational, however, as they only control the nervous symptoms and do not relieve the cause.

The Baccelli treatment, which consists of the injection subcutaneously of carbolic acid in a 1 per cent to 3 per cent solution, at intervals from two to four hours, and in such quantities that no less than three grains are used daily, and as much as six or eight a day. This method has been followed mainly in Italy, where it originated, and has received very little consideration and support in this country. The results obtained in the hands of surgeons in experiments upon animals have not been gratifying, nor has it proven as effective as claimed by its Italian friends. It may be used, however, in conjunction with the serum treatment, or in cases where the serum cannot be obtained.

One must consider that no matter which method might be used for the introduction of the anti-toxin, it must be given in large quantities. Behring, for instance, considers that a dose of 500 units is essential for a subcutaneous injection and 200 units as a prophylactic dose. The anti-toxin treatment has many methods of administration, but its effects undoubtedly must be sought by a method which must bring it in as close contact as possible with the toxins and in the most direct manner. Consequently, we need not consider the subcutaneous injection of anti-toxin, as it is only of avail as a prophylactic, or when used in conjunction with other measures. The intravenous injection can also only be of service as an aid to a more direct method. Indeed, Symmers, in *American Medicine*, August 15, 1903, says that the intravenous



injection is the least rational of all, because the anti-toxin going directly into the right heart becomes aerated as it passes through the lesser circulation, and is deprived of some of its potency. This objection has also been applied to the subcutaneous method, but is still more decided as regards the intravenous. The serum can be injected into the vein with a quantity of normal salt solution, before which one might allow a large amount of venous blood to escape.

The cerebral method has practically been abandoned, for experiments have proven that the toxins are not present there and that the anti-toxin does not diffuse itself downwards. Besides, the danger of hemorrhage or an abscess resulting from an injection must be considered. A small piece of bone is removed from the frontal region, on one or both sides, by means of a trephine, and the serum injected into the frontal region of each hemisphere. According to Kocher, the serum may be injected into the lateral ventricles or allowed to diffuse itself under the dura.

The subdural or intraspinal method, which has received the indorsement of pathologists as well as surgeons in the past two years, seems destined to be the only rational treatment for this terrible and dreadful disease. The method is similar to that followed in the intraspinal injection of cocain. The needle is inserted between the third and fourth or fourth and fifth lumbar vertebræ. Some spinal fluid is allowed to escape, either as much as the amount of serum to be injected, or even more, and 5 c. c. to 60 c. c. of the serum, depending upon the severity of the case, is injected very slowly. There does not seem to be any special limit to the amount of spinal fluid which can be removed or serum injected, as collapse has not followed the withdrawal of 100 c. c. or more of spinal fluid, where only 10 c. c. of anti-toxin was injected. I would suggest, however, that as the spinal fluid is known to be so highly toxic, it would be well to remove from 100 to 200 drops at the first injection and then inject the serum combined with normal salt solution in an equal amount. In this way we could prevent a possible disturbance of the equilibrium of the cerebro-spinal fluid. Of course, the earlier this method of treatment is instituted the better the results obtained, as the toxins can be more easily neutralized and too great a damage of the spinal cells prevented. In one case from 1 oz. to 1½ oz. of spinal fluid was

removed each time and 10 c. c. of serum injected, the total amount removed being 14 oz. and of the serum 11 oz. being injected. In another case the amount of spinal fluid withdrawn was from 100 to 140 drops and from 8 to 12 c. c. injected.

The combined methods of injection of anti-toxin into the motor nerves of the part in which the primary affection lies and as near the cord as possible, together with the subdural method, seems quite feasible and reasonable. For it seems that the toxins can only reach the spinal ganglia through the motor nerves and enter these through the terminal muscle end apparatus. If, for instance, the wound is in the hand, the brachial plexus is exposed and the inner and outer heads of the median, the ulnar, musculo-spiral, musculo-cutaneous and circumflex nerve are injected with 5 to 10 c. c. of the serum.

The other two methods of treatment, the injection of an emulsion of brain substance, and the removal of spinal fluid and its replacement by normal salt solution, or the subcutaneous or intravenous infusion of large amounts of normal salt solution, need no special consideration. For they have either received no recognition or have been found wanting in the ultimate results.

All methods of treatment have their advocates, and one is struck by the number of excellent results obtained by different writers with the various treatments. Not that one should doubt the reports, but it only serves to show that there is no one method which has been absolutely accepted. Some surgeons will undoubtedly try all methods in very severely acute cases, and one cannot help but feel justified in attempting any and all procedures when there is such terrible toxic infection to deal with. However, judging from the reports of the past eighteen months and the excellent results, as well as the pathological demonstrations of this infection, by such noted men as Von Leyden and Jakob, of Germany, and Vallas and Sicard, of France, we cannot help but feel that the intraspinal method will be the one of choice in the future treatment of this disease. Indeed, if we accept the fact that the toxins are localized in the spinal cord, and that the spinal fluid is the toxic agent, we must acknowledge that the use of the anti-toxin in a direct manner and in large quantities should be the most effective and thorough method of cure.

The only question involved in this treatment will be in regard

to those cases which have to be dealt with in private homes, as aseptic conditions can hardly be expected. We are confronted at times with a state of affairs which will not permit us to send a case to a hospital or a private institution, and one must determine then and there what course to pursue. Personally, I feel that placed in a position of that kind, I would not hesitate, if allowed, to carry out the intraspinal procedure, even at the risk of a fatal result, which might be expected under any symptomatic treatment. No matter how heroic or dangerous this method of treatment may seem under those conditions, we must feel that we are justified in attempting it.

#### REFERENCES.

Literature of the past eighteen months.

Reference Handbook of the Medical Sciences.

*Progressive Medicine* for the past two years.

#### DISCUSSION.

DR. LAZARD said that it was a well recognized principle that the mortality of tetanus was in direct proportion to the period of incubation. In 1903 the City of Rochester, N. Y., had donated antitetanic serum to all physicians treating cases of accidents on the Fourth of July. As a result of this there were no cases of tetanus resulting from these injuries. It was to be remembered that the tetanus toxin travels by the nerve trunks and not by the vascular system. He reported a case of a man who had run a nail in his foot one week before he had seen him. He gave him on the first day ten c. c. of antitetanic serum and treated the local condition with thorough surgical measures. He repeated this dose on the second day and on the third day gave him an injection of 5 minims of carbolic acid in 100 m. of water. The patient recovered. There are two kinds of tetanus, the acute and the chronic. He believes that all chronic cases will get well, no matter what is done for them, so long as they are kept quiet, and that all acute cases will die, no matter what they do for them.

DR. PERKINS said that although most of the tetanus of last year was treated by antitoxin, the mortality was 95%, which is a very high mortality. There were many remedies, but few results. The theory that the toxin passes through the nerve trunks was not

universally accepted, but was gaining ground. Some have put antitoxin in the wound, with the hope of overcoming the action of the toxin, but this starts the antitoxin behind the toxin, with little hope of its catching up. Others have placed the antitoxin in the nerve trunks above the seat of inoculation. He cited a case reported in a recent Journal in which the anterior crural nerves were injected with the antitoxin, but the patient did not improve. The attending surgeon then thought of the obturator and so injected the antitoxin into the spinal cord, with happy results. A case in Ward 10 had recovered from tetanus simply by administration of bromide and chloral.

DR. VAN WART said that he objected to speaking of the *theory* of the transmission of the toxin by the nerve trunks, as it has been anatomically shown that the lymph spaces of the nerves are directly connected with those of the cord. This has been experimentally shown on animals. There is danger of setting up a myelitis by injecting the antitoxin into the cord. As regards the withdrawal of fluid from the spinal canal a certain amount of care should be exercised. If too much is withdrawn we are apt to have minute hemorrhages of the cord. This has been experimentally proved in animals. Usually 10 c. c. are withdrawn and from this no pain seems to result. However, more is withdrawn and replaced by antitoxin, and there is very little objection, provided the cord is not injured. Even a small withdrawal of fluid, however, is apt to cause a rise in temperature. The toxin of tetanus attacks principally the motor cells in the anterior horn of the cord. In tetanus the cells in this region show a diffuse staining by the method of Nissl. The Nissl bodies have disappeared and the nuclei are not easily seen.

DR. GESSNER thought that we are apt to jump at conclusions too hastily as regards the treatment of tetanus, basing our conclusions on too few cases. At one time he got excellent results from the use of antitoxin alone, but he has not been getting good results of late. He asked what results had been obtained from amputation of the limb in cases of tetanus.

DR. POTHIER said that nothing had been said of the researches of Roux at the Pasteur Institute. They showed undoubtedly that the toxin is fixed by the nerve cells. They inoculated animals with



the toxin and then with the antitoxin, but found that if once the toxin is fixed by the nerve cells that the antitoxin is of no avail. The acuteness of the case must be taken into account before one is in a position to say what method should be employed.

DR. GLEBKE reported two cases of tetanus, the first being treated by bromide and chloral, with recovery, and the second by antitetanic serum, with death. He knew of four cases which had recovered out of seven treated with serum.

DR. PERKINS said he still believed in saying "theory" of transmission, as it was not proved definitely to be a fact. The experiments had been conducted on animals and it is well known that animal tetanus and human tetanus are different in their manifestations. He, therefore, still felt justified in using the word theory until greater lapse of time and more abundant data could establish the "fact."

DR. LAZARD wished to specially lay stress upon the point that there are two forms of tetanus, the acute and the chronic. The chronic get well if we simply allay the nervous irritability, while the acute will die in spite of all treatment. In reporting cases of tetanus the period of incubation should be stated.

DR. JACOBY, in closing the discussion, reported one case treated by Dr. Parham, and one by himself, in which the intravenous method was followed. Fifty c. c. of serum in one pint of physiologic salt solution were injected intravenously, but death resulted. In the second case 50 c. c. in one pint of salt solution were injected in the vein, together with 100 c. c. of serum, by the skin, but the patient succumbed about 15 hours later. It was necessary to understand what variety one is dealing with, whether the acute, subacute or chronic form. He advised the intraspinal injection in the acute. Dr. Lazard's case was evidently one of chronic tetanus. Dr. Jacoby had been unable to find a single case of fatal result from removal of the spinal fluid or any serious consequences. He cited one case in which 160 m. of fluid were withdrawn, and another in which 605 m. were removed. Both patients recovered. He stated that good results had been experienced by amputation of the tails of cats, but that he thought this treatment was too severe to be employed on the human subject. The universal method now in vogue was the intraspinal, and the sooner that we would accept this method, the better would be our results. He thought that some cases died of chloral poisoning and not of tetanus.

DR. LANDAUER read a paper entitled

### Malarial Fever, Unusual Form.

MR. PRESIDENT AND GENTLEMEN : I apologize to you for submitting a paper on malaria, but if you will let me have your attention I will give you a report of two cases that I have found very interesting and instructive, especially so as in reviewing literature I can find no cases exactly similar on record.

Dr. Dabney, I believe, described to you a similar case sometime ago, and one or two other doctor friends have told me that they have had similar experience, but did not take the trouble to record their cases. In the North and East, especially, I have heard it said that a fever that does not answer to quinin is not malaria. That statement is too broad, and I believe it to be untrue. In most instances if quinin is properly administered, that is, in sufficient doses and at the proper time, it does act as a specific but occasionally fails as in a case I will soon report to you where the microscope revealed the plasmodia malariae and removed all doubts as to the nature of the fever; besides the presence of the plasmodia we had a typical history with the periodicity of attack, enlarged spleen and the other symptoms usually accompanying.

*Case I.* Mrs. S., age 37, married seventeen years. Occupation house-wife, mother of two children, both living and well; labors normal, each lasting for about five or six hours; she has been a resident of this city all her life.

*Family History.* Father died of yellow fever in '78; previous health had always been good. Mother died suddenly in '94 presumably of some heart affection, though she had never before suffered in any way from it and had always enjoyed good health. Has four brothers living and well; four sisters also living and well.

*Past History.* Never sick; enjoyed good health up to present illness. No menstrual, nephritic, or intestinal trouble.

*Present History.* About nine years ago had her first attack, which was similar in all details to the present one. First noticed a feeling of malaise, no appetite, generally nervous and depressed. This continued for a day or two, then had a chill followed by a high fever with nausea, vomiting, headache, which was severe and throbbing in character, located in the occipital region.

These symptoms lasted two or three days, and within a week she would entirely recover and feel herself again for three to six weeks, then would come the remission. This has continued now for nine years. Has consulted a number of physicians, and was advised by one to move to the North or East. In '98 she moved to New York, where she resided for one year with no relief of any of the symptoms; she returned here and continued as before.

I was called to see her June, '93, just after an attack, found her pale, emaciation not pronounced, in fact general appearance good; *inspection* revealed nothing more; *palpation* apex beat in fifth intercostal space one-half inch below and one inch to the right of left nipple. *Liver* enlarged and plainly felt about an inch below the border of the ribs. *Spleen* not palpable, and *left kidney* freely movable.

*Percussion.* Revealed some enlargement of spleen as well as liver.

*Auscultation.* Revealed nothing excepting some anemic murmurs; made a diagnosis of malaria and put her on *Iron* and *Arsenic Tonic* as an interval treatment. Twenty days from then was called to see her again, as she had her usual prodromal symptoms; examined blood twice that day, morning and afternoon, found nothing except a slight leucocytosis seventy-eight hundred (7800), especially the mono-nuclear variety of white blood corpuscles; hemoglobin 80 per cent.

Put her on calomel and soda 5 grains each, in broken doses that night, followed by salts next morning and quinin sulphate grains 5 every three hours. The latter I continued for two days. Results no fever on that day and two consecutive days, in all giving her twelve (12) capsules five grains each.

Two days after the cessation of quinin the patient had a violent chill which lasted for nearly two hours; temperature went up to 104 3-5, pulse 140, full and bounding, respiration 25, face very flushed, complained of severe pains in occipital region and of being extremely nervous and weak, had spells of faintness when she would become very much cyanosed and respirations superficial and sighing. I gave her normal liquid digitalis 8 drops, strychn. sulph. grains 1-40 every three hours; applied ice caps to her head and used cold sponging to reduce temperature and allay nervousness; also put her on liquid diet for a few days. She continued

in this condition, having several of these fainting spells, and finally on third or fourth day was free of fever, sat up, and got up about sixth day and attended to her duties as usual. Twenty days thereafter was called again to see her with same prodromal symptoms, and although she had in the interval 5 drops of Fowler's Solution three times a day, which had been gradually increased to 10 drops without any ill effects on kidneys; then gave her a prescription quinin sulph. gr. 3, methylene blue gr. 3, strychn. sulph. and arsenious acid each grains 1-50. One capsule every three hours; continued this for three days, giving in all 12 capsules. When I stopped this prescription substituted the following: quinin sulph. grains 1, arsenious acid gr. 1-50, strychn. sulph. gr. 1-40; one capsule every four hours.

Two days after the first prescription was stopped, or after continuing on the second prescription for two days, chills and fever and all other symptoms returned as before. Used the same treatment as previously, and as an interval treatment returned to my Fowler's solution in the same doses as previously. On the twentieth day made a blood examination, found plasmodia malarie of various ages in abundance; that afternoon she had another chill before I had time to start my quinin; had purposely delayed the administration of quinin to make the blood examination; this attack was not as bad as the previous ones, and patient stated that at times the attacks were very mild, unaccompanied by headaches, fainting spells or other bad symptoms. This time, after she recovered, I put her on Warburg's pills (no aloes), two pills after each meal; on the twentieth day put her on the tincture, tablespoonful four times daily with results identical with my other remedies; chills and fever were absent as long as this was continued, but recurred two or three days after stopping it, in spite of my interval treatment; then decided to stop interval treatment, used Gude's Peptomangan as a general tonic, and on twentieth day gave her calomel and soda 5 grains each in broken doses and made hot applications of turpentine applied to both sides and next morning gave her salts and started a patent chill tonic, tablespoonful doses every three hours for three days; results *perfect*, no chill or fever; twenty days later repeated treatment, and for six months every twenty days did likewise. Results entire absence of chill or fever for two and a half months, and now she has had no treatment and



has been entirely free of all fever as well as chills. The longest period of immunity she has enjoyed since the beginning of these attacks.

The reason that I tried a remedy of which I did not know the constituents was because an acquaintance, six or seven years ago, had an attack very much similar to this, and the doctor had used everything; quinin, arsenic, methylene blue, Warburg's tincture, etc., with no effect, and finally this remedy was suggested to the family by one of the laity and used with brilliant results.

I saw it used in a second case a few weeks afterwards with equally good results, and now my case makes the third. Now, the question arises, of what is this tonic composed? What causes it to act so nicely when other remedies have so completely failed? It is said that large doses of arsenic in some forms cause it to give results. I can hardly agree with this, as in my case I have given arsenic in the form of Fowler's Solution as much as 10 drops three times a day, also arsenious acid in doses 1-50 of a grain with no results. I do not believe that the quinin that it may contain could act so beautifully as I tried quinin thoroughly with no results.

*Case II.* Miss G., age 28, occupation governess and school-teacher, born in Mississippi, parents living and well. Patient moved here two years ago.

*Past History.* Negative.

*Present History.* Was well up to March last, then had what she calls slow fever; was sent away for a change and fever persisted; was given several doses of quinin when she became very sick, and on recovery was told that she had a spell of congestion; convalescence was very slow and prolonged. She returned to this city in May, only to take the fever again; would have it two or three days consecutively weekly; temperature would only go from 100 to 101, and would disappear without treatment. She would be O. K. until the next week. This continued until the middle of June, and finally, about then, was called in after patient had had a chill; found spleen and liver enlarged, and with the history pronounced it malaria. Gave her quinin sulph. gr. 5, strychn. sulph. gr. 1-40 every three hours. After the second dose was hurriedly called to her bedside and found her in collapse, pulse 120, very weak and irregular; respiration very superficial and slow. Patient cyanotic

and covered with profuse clammy perspiration, and from her knees down very cold. Stimulated freely hypodermically; in twenty-five minutes she had rallied considerably; kept up the strychn. sulph. gr. 1-40 every three hours with brandy through the day and night, and next morning gave her quinin again with results similar though much exaggerated to the day before. Respiration entirely stopped, and had to use artificial respiration. Continued the treatment as outlined above and substituted Fowler's sol. in 5 drops every three hours for quinin. Patient made a good recovery, and these spells of depression are accounted for only by the idiosyncrasy of the patient.

### DISCUSSION.

DR. VAN WART mentioned that there had been in a recent number of the *British Medical Journal* a report of the use of sodium arsenite hypodermatically in one per cent. solution in cases of the tsetse fly in cattle, with apparently good results.

DR. MCGEEHEE said that one sentence in Dr. Landauer's paper had specially attracted his attention, that being, that if any fever did not yield to quinin in three or four days it was not malaria. He believed that all intermittent fevers not yielding in five or six days were not to be considered malaria. Results were not to be expected in the first forty-eight hours, but in five or six days if by the free administration of quinin the fever was not controlled, then he was ready to believe that it was not malaria. The microscope, though of great value, could not in all cases be absolutely relied upon, especially was this so in the æstivo-autumnal type; and since the Widal reaction was not obtainable until the seventh day, he believed it the duty of the practitioner in fevers of an unrecognized type to give quinin for at least a week. The special chill tonic referred to by Dr. Landauer recalled to his mind a pill, the formula of which he did not know, that he used in his early days of practice. The directions for this pill was to not repeat the dose, and he subsequently found that its efficacy depended upon its containing enormous doses of quinin, and he was inclined to believe that Dr. Landauer's success in using the chill tonic was founded on the same fact.

DR. LEMANN believed that most fevers of an intermittent type

that resisted quinin of five gr. doses every three hours was not malaria. During his service at the Charity Hospital as an interne he had occasion to observe three cases in which infection with both the plasmodia malariae and Eberth's bacillus existed in the same patient. The Widal's reaction in 1 to 150 dilution and repeated findings of plasmodia were present in these cases.

DR. WEIS said that it made much difference as to the kind of malarial infection whether quinin would affect it or not. During his service at the Massachusetts General Hospital he had occasion to observe 80 malarial patients, soldiers returning from Cuba and Porto Rico. Of this number in 70 plasmodia was found, about 50 of which were the æstivo-autumnal type. The æstivo-autumnal variety got better on arsenic, but even when discharged apparently well the organism was found in the blood, in some of the cases. Quinin had apparently no effect upon the æstivo-autumnal type. The quartan type was rare, and in his experience was not influenced by any drugs. In the series of 80 cases, two cases of "typho-malaria," *i. e.*, typhoid and malaria, had been microscopically demonstrated. There were no other records of such mixed fevers in the records of the Massachusetts General Hospital and the Boston men, as a whole, had not believed in the two infections up to that time.

DR. NELKEN said that at the meeting of the A. M. A. held in New Orleans, Dr. Musser quoted Osler as saying that north of Mason and Dixon's line every complicated case of continued fever that did not yield to quinin in four days should be considered typhoid and not malaria. Dr. Musser thought that that rule applied just as forcibly south as it did north of Mason and Dixon's line. Dr. Nelken certainly did not think that physicians in this section would agree with Dr. Weis that the æstivo-autumnal type of malaria was not influenced by quinin. All our clinical experience was opposed to such a conclusion. If true, Dr. Musser's statement would be fallacious. As regards the quartan parasite in the blood of malarial patients in the Charity Hospital, this organism was occasionally found.

DR. BRUNS said that his experience, in differing from that of the general practitioner, might be of peculiar use in this discussion. He frequently saw cases that had something the matter with them, without knowing what; having perhaps a peculiar feeling in the

head and thinking this probably due to errors of refraction, would consult a specialist. He had seen a large number of malarial patients who lacked any particular line of symptoms, simply they did not feel normal, that was all. There was no temperature to speak of, it rarely being more than 99-5 during the day. These cases do get well under quinin if given in a form that is absorbed in ample quantities and over a long enough period. Personally he had had the experience with chronic malaria that he was speaking of. He thought he was hipped. Quinin given in ordinary ways gave no results. The bisulphate in solution given on an empty stomach was the first thing to give him any relief; it made him feel better, and finally he began to like it. Later he used Warburg's tincture and arsenic alternately. This was not to be taken for weeks or even for months, but for years. He was a living example of what he was talking about.

DR. POTHIER was sorry that he had not heard the paper. The most frequent parasites found in New Orleans were the tertian and æstivo-autumnal. The quartan was rarely found, he having seen it only two or three times at the Charity Hospital. As for the crescentic bodies of the æstivo-autumnal parasites seen in the blood after quinin had been given, there was nothing peculiar, for the crescents seen in the æstivo-autumnal are more resistant and represent the asexual form of the organism, and for that reason are innocuous and cannot develop in the blood. For this development they need the mosquito, where they develop into an active agent. The same may be said of the asexual forms of the tertian and quartan types.

DR. LEBEUF said that the frequent failure with the use of quinin was because it was not given in sufficient doses. He had used a special preparation in teaspoonful doses every three hours, which had given him very good results in the earlier years of his practice. He believed its efficiency was founded on its containing large quantities of quinin. The secret of all these proprietary or formulary preparations were in the fact of changing the form of the quinin. Some of these preparations have cinchonidine.

DR. VAN WART said that quartan malaria was probably widely distributed throughout North America, and mentioned a case observed in Montreal in a man who had never been out of Canada.

DR. WEIS said that the only experience which he had with



æstivo-autumnal malaria was in the 72 soldiers mentioned before. In these cases arsenic was the only thing that seemed to influence the disease. Some men believed that the patients got better of the æstivo-autumnal type not so much from the arsenic, but because the plasmodia simply exhausted its virulence, going into the inactive crescent stage. Dr. Weis said that the fact that in spite of fully dosing with arsenic and quinin the æstivo-autumnal parasite was not destroyed, but could be demonstrated by crescents in the blood; hence arsenic and quinin could not be said to *cure*.

DR. LEMANN did not believe in the clinical diagnosis of typhomalaria, but a coincident infection with plasmodia malarix and Eberth's bacillus occasionally occurred.

DR. LANDAUER, in answer to Dr. McGehee, said that he gave ten drops of Fowler's solution four times a day for three days with no ill effects on kidneys. He would hesitate to use larger dosage, unless he could watch the patient's urine and condition most carefully. In reply to Dr. Weis, he said that malaria and typhoid undoubtedly occurred at the same time. He had seen it several times.

DR. JOSEPH D. WEIS read a paper entitled

### **The Blood in Uncinariasis, With Report of a Case.**

I shall by no means go into the whole subject of uncinariasis. It is from the unusual way in which the diagnosis of the case, which I shall present to you in a few moments, was made, that it seems to me profitable, as well as interesting, not only to report the case, but to make a few statements with regard to the blood in uncinariasis; what we can learn from it as to diagnosis, prognosis and treatment, with a few theoretical remarks based upon the modern theories of immunity.

Miss X., in the training school for nurses at the Touro Infirmary, with excellent family history, was a resident of Woodville, Miss., from which place she came last September, 1903, into the Hospital as nurse.

In her past history are only the usual children diseases, excepting an attack of malaria when 7 years old; never any signs of malaria since. For the past year Miss X. says she has been losing her color, *i. e.*, paleness was noticed before she came to New Orleans.

Associated with her loss of color was some weakness, headache and feverish sensations at night, and the fact that she was more and more easily tired on slight exertion and suffered from palpitation and orthopnoea. On May 14, 1904, she went to Woodville for ten days; while there she was exposed to measles. After her return to duty on May 17th she had a slight attack of measles, but was again on duty June 2d. Every evening after this attack the patient says she was feverish, and constantly tired and weak and more or less exhausted. She entered the ward June 10th, and was treated with no results. A temperature still continued with regular rises every evening, the maximum being 102.8 degrees, morning 99 degrees. There was complaint while in bed of only headache and weakness; the bowels were constipated.

On June 16th a blood examination for *plasmodium malariae* was asked for, and an assistant house officer brought into the laboratory a blood smear for examination. The examination for malaria was negative, and as I am in the habit of always staining smears when examining for malaria I noticed an enormous eosinophilia, which upon differential count of 500 white cells showed tremendous increase of 70 per cent.

The blood examination in detail (June 16): Hemoglobin 35%, reds 4,800,000, whites 20,000. Differential count: Polymorphonuclear neutrophiles 20%, large mononuclear lymphocytes 1.5%, small mononuclear lymphocytes 7%, transitional forms .5%, mast cells 1%, eosinophiles 70%.

During this count of 500 white cells no nucleated reds were seen, some achromia and slight poikilocytosis with excess of microcytes over mactocytes were present.

I at once made investigation as to a cause for this eosinophilia.

I now saw the patient for the first time. The skin was thoroughly searched for any pathologic condition and revealed no lesion. A marked pallor was observed and a chlorotic hue about the mouth and chin was noticeable. A rather loud blowing systolic murmur, best heard over the pulmonic area, with an accentuated pulmonic second sound, was found, and a faint bruit de diable in the neck. The rest of the physical examination was negative. There was absolutely no abdominal tenderness.

I made the diagnosis of intestinal parasites, and here is the point: An eosinophilia without skin lesion and without signs or

symptoms of trichinosis seems to me enough, if associated with a chloro-anemia, to justify such a snap diagnosis.

There was no abnormality of appetite (no dirt eating, etc.).

The eggs of *Uncinaria Americana* were found upon first examination of the feces and after thymol (June 18) and a purgative, twelve worms were found in the first stool. The blood count was again made and showed:

Hemoglobin 40 per cent, reds 4,800,000, whites 14,000. Differential count: P. neutrophiles 35%, large m. lymphocytes 9%, small m. lymphocytes 12.5%, transitional forms 2.5%, mast cells 1%, eosinophiles 40%.

A drop of 30% in the eosinophiles, with a corresponding rise in the p. neutrophiles and a rise in hemoglobin.

This count was made eighteen hours after the first uncinaria were found in the stool, four days after the first count.

The case is finished in a few words. There was no temperature at all after the first dose of thymol. In six days (June 24) another treatment with thymol produced more uncinaria, and eighteen hours later the blood showed:

Hemoglobin 50%, reds 5,200,000, whites 10,000. Differential count: P. neutrophiles 52%, large m. lymphocytes 4%, small m. lymphocytes 12%, transitional forms 2%, mast cells 1%, eosinophiles 29%.

The patient steadily grew stronger, taking iron, arsenic and strychnia and the blood in seven days (July 1) showed:

Hemoglobins 70%, reds 5,800,000, whites 9,000. Differential count: P. neutrophiles 55%, large m. lymphocytes 6%, small m. lymphocytes 12%, transitional forms 5%, mast cells 1%, eosinophiles 23%.

The increase in transitional forms is of interest. Nine days after the second treatment thymol was again given (July 3). No uncinaria were found in six stools.

The patient was sent home for two weeks rest, with Fowler's solution, and was in Woodville until July 23d. The blood count on leaving the hospital, 18 hours after the last treatment, is practically the same as that two days before treatment. The examination of the blood, July 23d, three weeks after last count, showed:

Hemoglobin 80%, reds 5,800,000, whites 8,000. Differential count: P. neutrophiles 68%, large m. lymphocytes 6.5%, small m.

lymphocytes 18%, transitional forms 2.5%, mast cells 1%, eosinophiles 14%.

There was noticed a marked diminution in the poikilocytosis and an increase in the color index, *i. e.*, less achromia.

Here then is a case of uncinariasis of very mild form, with no symptoms to call the attention to intestinal parasite, the clinical picture being that of the so often diagnosticated chronic malaria, *i. e.*, a chloroanemia with temperature.

Examination of the blood for malaria showed an eosinophilia which led to the true finding in the case.

Lemann<sup>13</sup> has shown the importance of uncinariasis to the Southern practitioner, and Guthrie's<sup>13</sup> report of his case is no doubt still fresh in your minds. The division of uncinariasis into the *Uncinaria Americana* and *Anchylostoma Duodenale* has been pointed out by Stiles<sup>10</sup>. My case is one of *Uncinaria Americana*, shown by the anatomy of the worm itself.

Cabot<sup>8</sup> states the first work on the blood on uncinariasis was done in 1892 by Zappert<sup>9</sup>. His report was a moderate anemia with low color index and no statement with regard to the eosinophile cells. Eosinophilia, according to Cabot<sup>8</sup>, was first noted by Muller and Rieder. Stiles<sup>10</sup> disregard for considering the blood count in diagnosis of uncinariasis is most extraordinary. He says "while they (blood counts) are exceedingly interesting from a pathological standpoint they have not appealed to me as so direct a method of diagnosing intestinal parasites, as is the fecal examination."<sup>10</sup> Indeed it is unquestionably not so direct a method, but since Stiles says: "I did not stop for blood counts, as these have been made by other men",<sup>10</sup> it is not to be cast aside as only interesting from the pathologic standpoint. It seems to me in such cases the pathologic standpoint would be the diagnostician's standpoint. We must not draw the lines too fine. Stiles is not a medical man and so his advice to us as physicians is open to criticism. He admits he did not take temperature carefully, considering observations along other lines of more importance. He leaves the temperature as he does the blood to "others."

I wish to take up the blood in some detail.

Buchlers<sup>1</sup> found eosinophilia in *Uncinariasis*, *Strongyloides Intestinalis*, *Ascaris Lumbricoides*, *Tænia Solium* and *Tænia Saginata*. Opie states that Strong<sup>3</sup> found the mucosa, the muscularis



mucosa and the submucosa of the small intestines infiltrated with eosinophile cells in a fatal case of uncinariasis, and again in a similar case Yates<sup>4</sup> notes the same accumulation. Opie<sup>2</sup> adds to the above list of animal parasites which cause an eosiniphilia *Trichina Spiralis*, *Filaria Bancrofti* and *Bilharzia Hematobia*. In 1898 T. R. Brown<sup>5</sup> showed conclusively how constantly the association of the eosinophilia is with trichinosis and since his paper eosinophilia has been a diagnostic point in this affection.

Opie<sup>2</sup> in "An Experimental Study of the Relation of Cells with Eosinophile Granulation to Infection with an Animal Parasite (*Trichina Spiralis*)," comes to the following conclusions: "The administration of trichina spiralis to the guinea pig causes an increase of the eosinophile leucocytes in the blood, comparable to that which accompanies human infection." That "Eosinophile cells accumulate in the mesenteric lymphatic glands and lungs and form foci which resemble small abscesses, in which polynuclear leucocytes (neutrophiles) are replaced by eosinophile cells."

"The cells do not differ from the eosinophile leucocytes of the circulating blood. The accumulation of eosinophile cells in the mesenteric lymphatic glands and in the lungs is explained by the transmission of the embryonic parasites through these organs." Opie further states in his conclusions that there is a characteristic change in the bone marrow which accompanies an increase of eosinophiles in the circulating blood in other organs. Marrow changes are reported by Capps<sup>14</sup> in his case of uncinariasis with autopsy.

Cells with eosinophile granulation are found by Opie in the marrow in immense numbers, particularly the eosinophilic myelocyte. He states therefore: "The bone marrow is the seat of the multiplication of the eosinophile leucocytes."<sup>12</sup>

There is then caused by animal parasites an eosiniphilia, which eosiniphilia is derived from the bone marrow. At first glance it is difficult to see how an intestinal parasite can affect the bone marrow. That these parasites do throw off a toxic substance is probable and that this circulating toxin should cause a change in the blood is not remarkable, but that in contradistinction to bacterial infection the leucocytosis should be of eosinophile cells rather than neutrophile cells is not only remarkable but of intense interest from

the standpoint of the chemistry of these cells and in relation also with Ehrlich's theory of immunity.

Opie<sup>16</sup> in his last paper on the "Relation of Cells with Eosinophile Granulations to Bacterial Infection," shows that bacterial infection causes the disappearance of the eosinophiles. And again in a paper on "The Occurrence of Cells with the Eosinophile Granulations and Their Relation to Nutrition,"<sup>12</sup> shows that the eosinophile cells play a very important part in metabolism.

They are abundantly found in the tissues of animals, especially in the mucosa of the dog's intestine and in the lungs.

There is an intimate relation between the lymphatic apparatus and the eosinophile cells. Opie<sup>12</sup> has noticed their abundance in the lymphoid tissue of the gastrointestinal mucosa, as well as their accumulation in the Peyer's patches of the small intestine and in the lymphoid follicles of the bronchi. This location of the eosinophile cells is of interest, since it is the intestinal parasite which causes the increase in the circulating blood.

Allen Smith<sup>7</sup> says: "The existence of the eosinophilia is suggestive of this (uncinariasis), as well as other forms of parasitism: the existence of a marked corpuscular anemia, especially without preservation of the classical hemoglobin relation prevailing in true progressive pernicious anemia and with relatively few normoblasts and megaloblasts is to be taken in the same suggestive light." Smith speaks of several cases in which both malaria and uncinariasis coexisted. This combination of diseases would necessarily change the blood picture, but it is of interest to know that both can and do attack the same host.

Boycott and Halden<sup>6</sup> have shown the anemia associated with uncinariasis does not stimulate a pernicious anemia.

Different statistics, such as given by Ashford-King,<sup>11</sup> Stiles,<sup>10</sup> Cabot,<sup>8</sup> etc., show chloro-anemia in uncinariasis of varying intensity. Counts of red cells in 65 cases taken from these statistics vary from 668,000 to 5,400,000. The hemoglobin varies, as well, from 10% to 100%. The average red count is above 300,000 and the average hemoglobin is below 50%. The differential counts in the same 65 cases show an eosinophilia varying from 3% to 72%. In these 65 cases, however, only *four* showed an eosinophile count below 6%, and all four were chronic cases lasting over a period of from three to six years.

The inference therefore can be drawn: A constant eosinophilia exists in uncinariasis, the more acute the disease the higher the percentage of eosinophile cells and when more chronic in character the count is lower; since Opie<sup>2</sup> has shown infection with a very large number of trichina causes a rapid diminution of the number of the eosinophile leucocytes and mild infection stimulates the eosinophile cells to active multiplication, but severe infection causes their destruction.

Again Ashford and King<sup>11</sup> make the following statement: "In chronic uncinariasis and in those who have been for a long time subject to a profound anemia, the eosinophilia is more apt to be low than high, and after treatment in chronic cases and in the late stages of the diseases a rise may be expected and is of good prognostic import. In those who have suffered but a short time with the disease or in whose blood regeneration is still active, a high eosinophilia is to be expected."

Ashford's conclusions, quoted by Cabot,<sup>8</sup> are that "After treatment in chronic cases and in those in the later stages of the disease a rise in the eosinophiles may be expected and is of good prognostic import. When, however, there is a fall in the eosinophiles and no improvements in the physical signs, death may often be the result."

There is return to normal only three or four months after disappearance of the uncinaria from the intestines.

A leucocytosis from 3,800 to 56,000 existed in the 65 cases above mentioned. Boycott and Haldane<sup>6</sup> found high counts early in the disease before the anemia is severe, and low counts in cases of three or four years' standing.

From this mass of facts the following conclusions may be drawn:

Acute uncinariasis (first six to twelve months) causes a leucocytosis, which leucocytosis is for the most part made up of eosinophile cells.

The more acute, *i. e.*, the earlier the disease, the higher this count, and the later the disease the lower the leucocytosis (eosinophile count). A point worth noting here is that Zappert<sup>15</sup> found normally a higher count of eosinophile cells in children than in adults.

Uncinariasis causes an anemia varying in intensity with the number of parasites and with the duration of the disease. The greater the number of parasites and the longer the duration of the disease,

the greater the anemia and vice versa. The anemia does not simulate a pernicious anemia, but rather a grave secondary anemia, as evinced by the predominance of normoblasts, if any nucleated red blood cells at all be present, and microcytes: achromia and a low percentage of hemoglobin.

Treatment of uncinariasis causes an immediate gain in the number of red blood cells and an increase of hemoglobin with a fall in the leucocytosis and per cent. of the eosinophile cells.

Sandwith, quoted by Cabot,<sup>8</sup> reports most remarkable increase of red cells as result of treatment.

The minimum gain is 310,000 cells, and a boy gained in one month 2,208,000 red cells per cubic millimeter, 10 patients gained over 2,000,000. The average in hemoglobin was 22% to 32%.

The diagnosis can be made when with a severe chloro-anemia or secondary anemia there is associated a high percentage of eosinophile cells with or without a leucocytosis. The leucocytosis and percentage of the eosinophile cells depend upon the duration of the illness.

Specific treatment causes a disappearance of the anemia; and the return of the eosinophile cells to absolute normal occurs only after three or four months of cure.

As to prognosis: When a case of long duration shows, after specific treatment no reactionary rise in the eosinophile cells nor increase in hemoglobin or red cells, the prognosis is grave; it is in contradistinction good when such rise does appear. In cases of short duration the fall in the percentage of the eosinophile cells with a rise in the red cells and the hemoglobin is of good prognostic import, and the absence of such a fall in the percentage of the eosinophiles is grave.

In children a rather higher percentage of the eosinophiles normally, must be taken into consideration.

A feature which I observed in all smears of this blood and which was of great interest to me is a constant increase in the number of blood plates. In all specimens of blood smears stained with Wright's<sup>17</sup> modification of Jenner's stain, the blood plates show with remarkable distinctness, such as is shown, in my experience, with no other blood stain. An occasional increase in the number of blood plates occurs temporarily in normal blood, but in this case there was a constant increase, which on July 23 for the first time



showed a decrease, or fall to normal. This excess of blood plates in uncinariasis I have not seen referred to by any of the observers. It seems worthy of note, but on account of our lack of knowledge of the physiology of this element of the blood, I shall refer any statement with regard to this phenomenon to a later date. A few theoretical remarks and I have done. Time will not allow me to take up the modern theories of immunity, but in the controversy for and against Metchnikoff's theory of phagocytosis and cellular origin of the immune body, I wish to offer this in evidence against him and for Ehrlich and the purely chemical character of the immune body. Here is no attempt at a phagocytosis. The eosinophile leucocytes are not phagocytic, but if then Metchnikoff is wrong and Ehrlich right that immunity is purely chemical, it can be supposed that the toxin of animal parasites being chemically different from the toxin of bacteria, does cause a stimulation of an entirely different chemical characteristic from that caused by bacterial infection, with the subsequent formation of a second chemical reactionary substance or anti-body entirely different in chemical composition from that caused by bacteria in general, as illustrated by the proliferation of this eosinophile cell or acid-loving cell. I offer this only as a suggestion with by no means any argument of proof.

The eosinophilia may be explained, however, on an entirely different basis. Opie<sup>12</sup> has shown that starvation "is followed by a decrease in the proportion and in the absolute number of eosinophile leucocytes in the peripheral circulation," and that "diminution in the number of the eosinophile cells is preceded by a temporary increase of these cells." The close relation between the nutrition of an animal and the number of the eosinophile cells is demonstrated by Opie<sup>12</sup> by the fact that "a temporary fall in weight (of an animal) is accompanied by a rapid increase of the eosinophile leucocytes, while a rise in weight tends to retard this increase."

Hence it may be that the eosinophilia in uncinariasis is simply a result of disturbed nutrition without regard to any toxemia whatever.

In conclusion I want to insist upon this practical point, that in all of our Southern anemias, whether there be a malarial infection present or not, we should examine a stained specimen of blood for eosinophilia; and if the percentage of the eosinophiles in an anemic or chlorotic individual be above 5% or 6%, suspect intestinal para-

sites and give thymol. Whether we examine the stools or not, depends upon our thoroughness and conscientiousness. Thymol can do no harm and may do inestimable good.

Since writing this last sentence I read in the London letter to the *Journal of the American Medical Association* (July 9) a statement which forestalls my present idea exactly. Mr. A. E. Boycott, in speaking of the difficulty of finding the ova and worms of ankylostoma in the Cornwall miners recommends in a parliamentary paper the examination of the blood for eosinophila, and says "when there is more than 5% of eosinophile cells there is a probability of the existence of ankylostoma, a probability which would be raised to practical certainty by such an amount as eight per cent."

#### BIBLIOGRAPHY.

1. Buchlers: *Munch. Med. Woch.*, 1904, Vol. 41, p. 23.
2. Opie: *Am. Jl. of the Med. Sci.*, March, 1904.
3. Strong: Circulars on Tropical Diseases, No. 1, Chief Surgeon's Office, Manilla, 1901 (quoted by Opie<sup>2</sup>.)
4. Yates: *Bulletin Johns Hopkins Hospital*, 1901, Vol. 12, p. XX 366. (Opie<sup>2</sup>.)
5. Brown: *Jl. Exper. Med.*, 1898, Vol. 3, p. 315.
6. Boycott and Haldane (quoted by Cabot). *Jl. of Hygiene*, 1903, Vol. 3.
7. Allen Smith: *Internat. Clinics*, Vol. 2, 14th series, 1904, p. 68.
8. Cabot: *Clinical Examination of the Blood*, 5th ed., N. Y., 1904.
9. Zappert (quoted by Cabot): *Wien. Klin. Woch.*, 1892, No. 24.
10. Stiles: Report on the Prevalence and Distribution of Uncinariasis in the U. S.; Hygienic Laboratory Bulletin No. 10, Feb., 1903.
11. Ashford-King: *N. O. Med. & Surg. Jl.*, March and April, 1904.
12. Opie: *Amer. Jl. Med. Sci.*, Feb., 1904.
13. Guthrie and Lemann: *N. O. Med. & Surg. Jl.*, Oct., 1903.
14. Capps: *Jl. Am. Med. Assn.*, January 3, 1903.
15. Zappert (quoted by Opie): *Zeit. f. Klin. Med.*, 1893, vol. 22, p. 227.

16. Opie: *Amer. Jl. Med. Sci.*, June, 1904.
17. Wright, J. H.: *Jl. Med. Research*, Jan., 1902.

#### DISCUSSION.

DR. POTHIER had made quite a number of blood analyses in the Charity Hospital of patients suffering from uncinariasis, and in certain percentages of them had observed an increase of the eosinophiles. In fact the results of the blood analysis of cases of unsuspected uncinaria suggested the examination of the stool, and this being made uncinaria were found. In advanced cases he had found an increased number of platelets, and had also noticed a peculiar staining of the red cells. He had seen a large percentage of the transitional form of leucocytes, and in some cases what appeared to be myelocytes. He thought that Dr. Weis' paper was a valuable contribution.

DR. LEMANN related several cases of blood analyses from which he had been able to suggest to the physician in charge to have the stools examined for uncinaria. These latter examinations were positive. He wished to second the stand taken by Dr. Weis and was convinced that blood analysis was an important guide in suspecting the presence of uncinaria.

DR. HOLT related the case of his fox terrier that manifested and showed all the symptoms of uncinaria. There was abdominal distress, especially in the region of the duodenum, with declining health and finally bloody discharges from the rectum occurred. The fecal matter was examined, but failed to reveal any eggs. The animal was put upon thymol, with rapid improvement and final recovery. He was convinced that the case was one of uncinaria, and he mentioned the instance simply to show the possibility of uncinaria being found in the lower animals.

DR. PARHAM said the subject of uncinariasis was one of particular interest to this section of the country. It had been pretty thoroughly discussed at a previous meeting of this Society and he did not intend to say much on this occasion, but he thought that Dr. Weis had very properly and very interestingly brought out the advisability of blood examinations in all chronic anemias where the diagnosis could not be at once established as malarial. The presence of eosinophilia always afforded ground of suspicion of intestinal parasites, and beyond a certain percentage established

the diagnosis or at least called for an examination of the feces. The speaker referred to a case, mentioned in the previous discussion last year, of a man treated for thirteen months in one of the institutions of this city for pernicious anemia. He had subsequently been examined in Chicago by a pathologist, who from the finding of marked eosinophilia had suggested hook-worm disease, and established the diagnosis by finding them in the feces. The speaker thought the reader of the paper had made a very valuable addition to our knowledge of the subject by showing the prognostic data to be deduced from a study of the eosinophilia.

DR. TEBAULT, JR., mentioned having reported the first case occurring in New Orleans. He found that in the treatment of cases of persistent anemia that in giving thymol in 10 grain doses that no harm would come therefrom, provided alcohol was not used.

DR. MAGRUDER regretted not having heard the greater part of the paper, since he was quite interested, having recently had a case under observation. The patient was a robust male, twenty years of age, who came to his office stating that he had not been well for two weeks. There was a peculiar pallor and bluish appearance of the young man's skin. From the blood examination ten per cent. of the eosinophiles were found, and the examination of the stools suggested. The ova of the uncinaria were found in small quantities, but never the adult parasites. The patient was put upon thymol of 30 grain doses, and greatly improved under this treatment.

DR. LEMANN, in reference to the case of Dr. Magruder, said that the first examination showed ova, but repeated examinations of bloody stools after the administration of thymol showed neither ova nor adult worms.

DR. WEIS stated that the practical point of his paper was the fact that it being frequently difficult to find the ova in the feces in cases of uncinaria, the blood findings (eosinophilia) in these cases, were of great value from a standpoint of diagnosis as well as prognosis.



# N. O. Medical and Surgical Journal

---

## Editorial Department.

---

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

---

---

### The Fifteenth International Medical Congress.

As already announced in the JOURNAL, this congress will take place in Lisbon from April 19, 1906, lasting one week. Our Portuguese confrères evidently have been actively engaged in the necessary preparations, for already the first official bulletin of the congress has been issued. It shows that the Commission of Organization was promptly formed after the return of the president and the secretary from the Madrid Congress which elected them. The executive committee, composed of the officers of the commission and six of its members, met in July and in October, 1903, and twice in January, 1904.

The rules of the congress, to the extent of twenty-three articles, are published. The most important are those fixing the date, as above mentioned; limiting the membership to physicians and to scientists proposed by the executive committee or by the national committees; fixing the subscription at \$5.00; dividing the congress into seventeen sections; providing for two general sessions, one on the first and one on the last day; selecting French as the official language and English, French and German as the languages allowed at the general sessions and in the sections; and directing that titles of articles with a short résumé be sent in before January 1, 1906, in order that they may be printed and distributed in time to the members of the respective sections.

The local officers of the sections are named, and very comprehensive rules for their guidance are published. Rules also for the management of the secretary general's office are announced and the names of members of the national committees, as far as already

constituted, are listed. The national committee for the United States has not yet been formed, but to Dr. John H. Musser, of Philadelphia, has been assigned this task.

The commission deserves great credit for its labors up to date, and for its sacrifice in eliminating its own language from the deliberations in order to conform to the original rule limiting those taking part to the use of English, French and German.

We predict a great success for this meeting in Portugal, whose people is one of the most cheerful and hospitable in the world. As the song has it, "Les Portugais sont toujours gais," and we hope to be gay with them in 1906.

---

### Glucose in Diabetes.

At first blush, the administration of glucose in the treatment of diabetes mellitus seems a rather startling proposition. Yet, when resorted to in the manner recently suggested by Arnheim, its use appears to be quite a rational one.

The idea is to give it by rectum in such a way as to have it absorbed as much as possible without passing through the portal vein in order not to provoke the alimentary glycosuria.

In the case reported, a preliminary plugging of the rectum was made nearly four inches above the sphincter by means of a wad of cotton saturated with olive oil. Then from one and a half to two ounces of a 30% solution of glucose was injected slowly into the rectum and retained.

The patient upon whom this was tried was suffering from a serious case of diabetes, was very much run down, and had acetonuria.

The result is stated to have been highly gratifying. Owing to the hydro-carbons thus supplied to the economy, the acetonuria disappeared and there followed a cessation of the glycosuria notwithstanding the fact that the patient resumed a normal diet. The report of Arnheim's case in the *Tribune Médicale* does not mention if the injection was administered only once or repeatedly.

We call attention to this treatment because it is very simple and has the advantage of doing away with dieting which always means deprivation and suffering for the patient and against which he

often rebels. Of course the effect in one case is not equivalent to a demonstration, still it is sufficient to stimulate experimentation and observation on similar lines.

---

### **The Bordeaux Mixture.**

While petroleum is recognized to be about the most effective agent for the destruction of the mosquito larvæ in pools and receptacles of stagnant water, its odor is sometimes an objection.

A valuable substitute in such cases is the so-called Bordeaux mixture which has been used for a long time by agriculturists and has been experimented with by the health authorities of New York. It is not only destructive of the larvæ, but is an excellent deodorizer and probably a good disinfectant. It is odorless, has little color, is inexpensive and safe to handle.

A stock solution may be made by dissolving thoroughly and separately one pound of sulphate of copper in five gallons of water and one pound of unslaked lime in five gallons of water, then mixing the two. This can be diluted with fifty parts of water at the time of using, and must be stirred in well.

---

### **Dr. Wm. Osler.**

Dr. William Osler, of Johns Hopkins, has been appointed Regius Professor of Medicine at Oxford. This chair is one of five founded by Henry VIII in 1546, and has been filled by many eminent men. The difficulty of filling it arose from the fact that the honors connected with it are large but the emoluments small.

While a high honor has been conferred on Dr. Osler, we feel that Oxford's gain is as great as Johns Hopkins' loss is severe.

## Abstracts, Extracts and Miscellany.

---

### Department of General Surgery.

---

In charge of DR. F. W. PARHAM, assisted by DR. F. LARUE, New Orleans.

---

IMMUNITY AGAINST INFECTION IN ABDOMINAL SURGERY.—We have just read with much pleasure and instruction the very interesting Cavendish lecture delivered by Professor von Mikulicz before the West London Medico-Chirurgical Society, and published in a recent number of *The Lancet*.

After some careful experiments on animals carried out under his direction by his assistant, Miyake, of Japan, he ventured upon a practical application of the method to man.

He injected a two per cent. solution of nucleic acid, about 50 c. c. beneath the skin of the chest, preferably about 12 hours before the operative attack, as this seems to be the time of the maximum leucocytosis in man resulting from the nucleic injection.

He carried out the method in forty-five cases of laparotomy, in which the peritoneum was exposed to infection from the gastrointestinal lumen or bile ducts. All but seven recovered, and of these not one death could be attributed to peritonitis.

In addition to the nucleic acid decinormal salt solution flushing of the cavity of the peritoneum with decinormal salt solution was carried only as he believed this aids the resisting power of the peritoneum.

*Comment.* This we regard as an important contribution to the prophylaxis of sepsis. Coming, as it does, from such a high and reliable source as is von Mikulicz, we must give it our careful consideration. The showing in forty-five abdominal cases made by the distinguished surgeon is certainly very flattering and encourages us to believe that a really valuable addition to our surgical therapeutic armamentarium has been made. It would seem, if further experience at the hands of other surgical clinicians confirm that of Mikulicz, plainly the duty of the surgeon to carry out such a prophylaxis.



lactic plan in any case where there was evident risk of serious peritoneal contamination.

The signs of the times hold out hope also that some actually curative method of combating already established sepsis will soon be discovered. Not to formalin nor to bi-chloride intravenous injections can we look with confidence for such a method. Either we must be able successfully to attack the forces of infection and remove it, or we must increase the internal defenses of the system. One of the most encouraging applications of the second principle is that suggested by Hume. He uses about a pint of one in ten thousand solution of nitrate of silver in sterile water repeated as occasion seems to demand. The leucocytosis is greatly stimulated and usually the temperature gradually falls and the general condition improves. The phagocytic action of the leucocytes, so enormously increased, and the antitoxic effect of something derived from the corpuscles seems to attack partly the invading germs, but especially to antagonize the action of the toxin; the normal resistance of the tissue and blood-cells, perhaps greatly enhanced, is able to do the rest, and the poison is gradually eliminated. The plan seems to us of great promise.

---

## Department of Obstetrics and Gynecology.

---

In charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER, New Orleans.

---

FORTY-ONE CASES OF PUERPERAL ECLAMPSIA TREATED BY THYROID EXTRACT.—Lieutenant Colonel Sturmer, S. M. S., contributes to the *Jour. Obs. and Gynec. of the British Empire* the results of the use of thyroid extract in 41 cases of eclampsia, a remedy first suggested by Dr. H. O. Nicholson in 1902. The observations were made in the Maternity Hospital, Madras, India.

Under the thyroid treatment, a patient on admission suffering from eclampsia is given ten grains, and five grains are administered every four hours afterwards. Should the urine be scanty, a saline injection of one or two pints is given under the breast or into the axilla and a hypodermic injection of half a grain of morphia is given.

Rupture of the membranes, followed by dilatation of the cervix and the early application of the forceps or other means of assisting labor was the usual practice adopted. Under thyroid treatment the maternal mortality had dropped to 12.2 per cent. Under morphia and saline infusion the mortality decreased, but it was not wholly satisfactory. The injection of saline solution did not cause any great increase in the flow of urine until after 24 hours had elapsed, whereas he has found that with 30-40 grains of the thyroid given in the 24 hours, the urine after the first two or three doses has shown a considerable increase, and by the end of 24 hours a very large increase has been noticed.

It will be of interest here to append the latest contribution to this subject of Dr. Nicholson, who first suggested thyroid extract in Eclampsia. This appears in the Jan., 1904, No. of the above mentioned journal, in which he states that thyroid extract appears to be an ideal vaso-dilator in cases of actual eclampsia, but it is then, as a rule, necessary to use very large doses.

Thirty to forty grains may be given at first, and a second dose of twenty or thirty grains may be required in six or eight hours if there are no evidences of improvement. These doses may appear to be somewhat heroic, but personally he would not hesitate to give much larger quantities to a patient suffering from severe eclampsia. One wishes to produce symptoms of thyroid intoxication as rapidly as possible, and so far as he has observed, less danger is incurred from giving a few large doses than from the continuous administration of much smaller quantities.

Believing in the powerful vaso-dilator properties of morphia, Dr. Nicholson believes in large doses of it hypodermatically, and thinks that the simultaneous or subsequent use of thyroid extract provides a most successful combination of remedies for the purpose of rapidly re-establishing the secretion of urine.

IN A CRITICAL REVIEW OF THE TREATMENT OF ECLAMPSIA, (*Ibid*) Comyns Berkeley obtained varying opinions as to the effects of thyroid. Croft had used it with no effect. Maclean has used it three times with beneficial effect. Haig Ferguson has found it to be a good diuretic. Ballyntine has used it, and thinks well of it. Kynoch noted that in a case of albuminuria and preg-

nacy it had no appreciable effect in diminishing the output of albumen, or increasing the amount of urine.

SHOULD WE OPERATE UPON CYSTIC OVARIES.—In the course of an article on cystic degeneration of the ovary, Palmer Findley (*Amer. Jour. Obst.*, June) brings up the above question, and concludes that the frequent occurrence of symptoms referable to the ovaries justifies the practice of resecting, or cauterizing, and sometimes of removing the ovary, when the abdomen has been opened for the relief of other pelvic lesions. This should be the rule where its performance would not entail greater risk to the patient.

Such a practice will frequently contribute to the complete relief of the patient.

The question of operating upon uncomplicated cases of cystic ovaries is more debatable. The lesion frequently has absolutely no clinical identity, and, therefore, should not be interfered with. On the other hand, in a definite proportion of cases there is sufficient local discomfort to justify both patient and surgeon interfering. Where pain, tenderness and dysmenorrhea are complained of, the surgeon must first satisfy himself that these complaints are not the result of associated lesions or the expression of a general nervous disorder. He believes in the resection, and even the complete removal of uncomplicated cystic ovaries, but only where local discomfort, which is the direct result of the lesion, justifies the sacrifice of part, or all of the ovaries. Such cases are not common.

---

## Department of General Medicine.

---

In charge of DR. E. M. DUPAQUIER, New Orleans.

---

INTESTINAL ORIGIN OF TETANUS.—Reported clinical and experimental cases of tetanus in beast and man, confirmed by autopsy and bacteriologic test, are strong evidence that the seat of tetanic infection may occur in the intestine. The bacillus of Nicolaier is almost constantly found in the intestine of the horse, the digestive tract of herbivora being eminently propitious to its maintenance and multiplication. In man, chiefly in horsemen, fieldhands and vegetarians, it has been found in the proportion of 20 and 30 per

cent. While it is a proven fact, firstly that the bacillus may be introduced in the intestine without causing infection, even when the intestinal mucosa had been purposely ulcerated, and, secondly, that the toxin is destroyed in the intestinal tract; it has been also demonstrated, on the other hand, that if the toxin be immediately absorbed at the time proper when and the spot proper where the formation of the puncture, scratch or ulceration takes place, there results a tetanic infection. Therefore, many cases of so-called "essential" tetanus, where no break in the continuity of the skin accounts for the entrance of the infectious agency, are thus explained, an erosion or an ulceration on the intestinal tract becomes the seat of absorption of the toxin before it is altered or destroyed.

**TETANUS COMPLICATING TYPHOID FEVER.**—While this is an exceptional complication, it is known to occur as shown by reports of cases in the literature with autopsy and bacteriologic research.

Caussade has lately contributed a most interesting example of the occurrence. He found that the bacillus of Nicolaier existed in the intestine of his case, and that it was through the intestine that the specific infection had occurred. This is a proof that tetanus is not always of cutaneous origin. For that matter, the uterus, the bladder, the excretory canals of glands are possible portals of entrance. On the 20th day of his typhoid fever case, Caussade observed unmistakable signs of tetanus. No hypodermic injection had been administered so far in the treatment. The case developed typical tetanus, and died on the 26th day. There was no doubt clinically that tetanus had appeared in the course of a positive case of typhoid. Cultures in anareobiose, giving the characteristic fecaloid odor, and, moreover, microscopic and experimental confirmation were made by expert Momont of the Pasteur Institute. The differentiation between the Nicolaier and Bienstock bacilli was carefully observed in the course of the research, leaving no doubt whatsoever as to the fact that genuine tetanus had taken place as stated above. It is evident that hereafter the common diagnosis of cerebro-spinal meningitis complicating typhoid fever should need revision.

**TREATMENT OF TETANUS BY EPIDURAL INJECTIONS.**—Antitetanic serum is a failure in the majority of cases as a curative, and as a



preventative as well, so says Mocard himself, the inventor of the serum, according to Lucas Championnière. The toxin traveling along the nervous tract, it is practically impossible to reach it through the blood stream by hypodermic administration of the antitoxin. Attempts have been made to inject the serum through the frontal lobes of the brain (ultra-cerebral injections) without much better results. It is now attempted to administer the serum into the sacral canal (epidural injections), and in certain cases (injury of the lower limbs) it seems that the antitoxin does better when administered by that channel. It is injected in the sub-arachnoidean space, thereby mixed with the cephalo-rachidian fluid, the idea being to place it on the same tract as the one followed by the toxin itself. Apert and Lhermite report a case of average severity, 15 days standing, in which 10 c.c. of serum was injected into the sacral canal at a dose. Four similar injections brought about a cure, one injection every other day. Each injection was followed by an amelioration lasting 36 hours. (*Tribune Médicale*, June 25, 1904. *Journal de Med. Interne*, June, 1904.)

---

## Department of Therapeutics.

---

In Charge of DR. J. A. STORCK, New Orleans.

---

HYDROCHLORIC ACID AS A CURATIVE FOR GOUT.—Falkenstein (*Berl. Kl. Woch.*, 1904, Vol. XLI.), has been a sufferer from gout for many years, and during this time has tried every remedy recommended for this disease without success, however; during the last two years he has changed his views concerning the pathogenesis of the condition, and has improved markedly as the result. He finds the real cause of this disease in a disturbance of the gastric glands, which secrete hydrochloric acid. Its cause is a diminished hydrochloric acid secretion, due to disease of the fundal glands, and to this is due the dyspepsia, which is the usual precursor and associate of the disease and its exacerbation; no one has ever been able to prove it to possess causal relations. Acting upon this theory, he has taken from 40 to 60 drops of pure hydrochloric acid in carbonated water daily for the last two years, curing his dyspepsia com-

pletely, and has been almost entirely free from gouty manifestations. He has had similar experience with patients suffering with the disease. In support of this theory, he says that the absence of gout in children and in warm climates depends on their simpler food, as well as the constant exercise in children and the elimination by perspiration in the tropics. The common gouty symptoms, as the chronic pharyngitis, the bronchial catarrh, the alveolar affections and the nervous symptoms are all favorably influenced by the medication. No other agent cures gout, not even colchicum, which can only shorten, not prevent an attack, and ultimately acts harmfully as it arrests the commencing dissolving process. He recommends hydrochloric acid in arterio-sclerosis and rheumatoid arthritis.—

*The Therapeutic Review.*

SILVER NITRATE INJECTIONS IN THE TREATMENT OF PHTHISIS.—Dr. T. J. Mays uses five minims of a 2 1-2 per cent. silver nitrate solution, preceded by a cocain solution of the same strength and the same dose—the latter being used to obviate the pain which would be produced by the former. “The number of injections which are necessary depend on circumstances. It is a good plan to begin with one injection on the side of the neck on which the affected lung is situated. In a week or ten days this is to be repeated, unless the original or previous injection is followed by too much irritation. Most of the injections are to be given on the affected side.”

From his own experience and that of others, Mays believes the following deductions may be drawn concerning the action of silver nitrate in the treatment of pulmonary phthisis:

1. That its best results are obtained in incipient cases, both in regard to the symptoms and signs.

2. That in most of the advanced cases of this disease it has a beneficial, and in some instances, an exceptional influence on the symptoms and physical signs.

3. That in a great majority of far-advanced cases it ameliorates the cough, expectoration, and other symptoms temporarily; while in a few instances of this kind its effects are apparently lasting.—

*The Tubercle.*

N. B.—Is it possible that the good results with silver nitrate, here reported, are due to an increase in the leucocytes? J. A. S.

CYPRESS OIL IN WHOOPING COUGH.—O. Saltmann (*Therapie der Gegernwat*, 1904, March, has lately employed cypress oil in whooping cough with better results than he has seen from the use of any other drug. The best method of employing is to pour the oil on the bed and underclothing of the children; he uses from 10 to 15 grams (3 to 4 drachms) of an alcohol solution four times daily. In cases where the paroxysms were violent at night, he gave the same doses once to twice every night. The oil reduces the number of paroxysms in all cases promptly and quickly; this refers to all ages of children. The intensity is diminished, their duration is shortened, the intervals between paroxysms prolonged, and no undesirable effects on gastro-intestinal tract, respiration, nervous system, heart nor kidney noticed. Choking sensations or vomiting either do not appear at all, or disappear soon; symptoms of suffocation became fewer each time; ecchymoses and epistaxis were never noticed, and epigastric and thoracic pain soon disappeared. The convulsive stage of the disease was markedly shortened by the oil. The general health of the patient did not suffer, and in some cases the weight even increased. In only two cases, which were brought in with serious complications, and of whom one died, were losses of weight noted. How it acts, or upon what organs, is not known.

*The Therapeutic Review.*

---

## Department of the Ear, Nose and Throat.

---

In charge of A. W. DEROLDES, M. D., and GORDON KING, M. D.,  
New Orleans.

---

TWO CASES OF INTRA-TRACHEAL GOITRE.—Neumayer has recently reported before the *Oto-Laryngological Society* of Munich two cases of intra-tracheal goitre occurring at the same period in sisters. The symptoms calling attention to the condition were gradually increasing dyspnea and a moderate enlargement of the thyroid gland. In one of the patients a tumor was seen by laryngoscopic examination occupying the posterior and lateral walls of the trachea at the level of the third ring, and in the other it pro-

jected from the posterior wall at about the same level. Both were similar in appearance, being smooth and round and coursed over by a number of vessels plainly visible in the laryngoscope. Both cases were subjected to treatment with iodide of potash which caused a diminution in the size of the growth and of the thyroid glands, giving relief to the dyspnea and, in the absence of any syphilitic history, affording proof of the nature of the tumors. According to the author seven such cases are on record besides these, in all of which the diagnosis had been made by postmortem examination.

THE USE OF ADRENALIN IN MALIGNANT AFFECTIONS OF THE THROAT.—Dr. A. Raoult, of Nancy, relates his experience in four cases of malignant disease of the throat treated with local applications of adrenalin. Three of these gave negative results, but in one case in which the seat of the affection was the right tonsil of a man seventy years of age, the effect of the applications was to cause a violent inflammatory reaction followed by a sloughing of the affected parts. After removal of the sloughs healthy granulating surfaces were left which showed a tendency to heal. Unfortunately the patient was lost to view before the observation was completed and the ultimate result was not known. It was learned later that the patient had died some months afterwards from other causes.—*Revue Hebdomadaire de Laryngologie*, etc., July 9th, 1904.

A NEOPLASM OF THE LARYNX SUCCESSFULLY TREATED WITH THE X-RAY.—A case of neoplasm of the larynx showing clinical evidences of malignancy in which it is claimed the X-ray was successfully applied, was reported by Drs. A. Béclère and Paul Viollet to the French Society of Laryngology at its annual meeting in May of this year. The patient was a man 51 years of age, who was affected with tumefaction involving the left side of the larynx, the aryteno-epiglottic fold, the base of the epiglottis, and the lateral lower part of the pharynx. The tumor appeared rounded and lobulated, with no ulceration of the surface. A lymphatic gland was enlarged in the neck in the neighborhood of the lesion. The patient had lost 18 pounds in weight in two months and suffered severely from dysphagia; the voice was much altered; the lungs showed no evidence of tuberculosis; and no history or evidence of syphilis was present. Applications of the X-ray were



made daily with occasional intervals of rest from Dec. 12th, 1903, to March 29th, 1904, exposures of from fifteen to ten minutes duration to the external surface of the larynx. The patient gained sixteen pounds under the treatment, the tumor disappeared, the voice returned, the dysphagia was relieved, and the case was declared cured, temporarily at least. Unfortunately, as in other cases of supposed malignant disease of the larynx reported cured by the X-ray in the hand of over enthusiastic advocates, no microscopical examination was ever made of the tumor, nor the anti-syphilitic treatment given a fair trial, the authors basing their diagnosis of malignancy purely on clinical symptoms.

---

## Department of Ophthalmology.

---

In Charge of **DRS. BRUNS AND ROBIN**, New Orleans.

---

**DEFINITE RESULTS OBTAINED FROM REMOVAL OF LENS IN HIGH MYOPIA.**—Operative treatment for high myopia by discission of the transparent lens was at first very coldly received. In the April number of the *Recueil d'Ophthalmologie*, Gelpke, from observations now quite old, shows these results: Fifty-four cases were under observation for from 2 to 4 years, and 66 cases from 4 to 3 years. The visual acuity remained stationary in 3 per cent of the cases, and was increased in 89 per cent; 7 per cent showed reduced acuity. It was increased by 1-2 47 times, by 1-4 14 times, by 1-10 4 times, by 1-20 4 times. That pseudo-accommodation exists in intelligent subjects, especially in the young—this “distance élastique” or range of accommodation is from 11 to 24 centimetres. The visual field was found generally unchanged; this is probably because Gelpke has latterly operated only on cases with practically normal fields. The refraction measured objectively under full dilation of the pupil has been reduced on an average by 21 dioptries. The astigmatism showed little variation. The deep membranes seemed unfavorably influenced in cases with lesions of the anterior part of the fundus. More frequently, however, the operation is followed by decided improvement of fundus lesions. The discissions performed on each eye were one in 4 cases, two in 54 cases,

three in 46 cases, four in 11 cases, five in 3 cases and six in 2 cases. Chronic hypertension was the greatest obstacle to favorable results. Was this hypertension the result of irritation of the iris by cortical masses, or from laceration of the suspensory ligament, or from irritation of the posterior surface of the cornea? The principal danger of the operation is not detachment of the retina but the secondary cataract; detachment of the retina not having been seen even as a late complication. The indications for the operation are the inefficiency of strong glasses in giving adequate vision for the patients' vocation or the continual progressiveness of the fundus lesions. Inflammatory lesions of the equator of the eye form an absolute contra indication to the operation. On the other hand, neither detachment of the retina nor macular lesions constitute a contra indication.

---

## Department of Nervous and Mental Diseases.

---

In charge of DR. P. E. ARCHINARD and DR. ROY M. VAN WART,  
New Orleans.

---

THE TREATMENT OF GENERAL PARESIS, AND OF OTHER TOXIC AND INFECTIOUS PSYCHOSES WITH SALT INFUSION.—Donath (*Allgemeine Geitschr. f. Psychiatrie*, Bd. 60), after considering the work of Mott and Halleburton, and others, and reasoning from its well-known good results in other conditions, recommends the use of the following solution, which he claims is isotonic with blood serum:

Potassium Sulphate .....	0.25
Potassium Chloride .....	1.00
Sodium Phosphate ( $N^2 H PO^4. 12 H^2O$ ) .....	3.10
Calcium Chloride .....	1.00
Aquæ dest .....	1000

After sterilizing and cooling to 40° C. 300 to 1,000 cc. are injected subcutaneously into the back or breast. These injections are made every three or four days. This was used on nine cases with no untoward results, and all showed marked improvement. He does not claim that it is curative in general paresis, but thinks it is of value in the early stages.

THE DIAGNOSTIC VALUE OF THE POSITION OF THE HEAD IN CEREBELLAR DISEASE.—Batten (*Bram*, 1903, No. 1) concludes as follows:

(1) A definite attitude of the head is not infrequently seen in cases of cerebellar disease in man, that position being with the ear approximated to the shoulder on the side opposite to the lesion, and with the face turned up to the side of the lesion.

(2) This position of the head, so far as the approximation of the ear to the shoulder is concerned, is the reverse, while the position of the face is the same as that seen after experimental ablation of one lobe of the cerebellum. To answer the second portion of the question, viz.: Can the sign be used as a symptom of diagnostic value, in the bare affirmation might lead to error, for the relative value of this symptom in comparison of a cerebellar lesion, is a question which needs most careful consideration in each individual case. It is probably a symptom of less importance than incoördination or weakness.

(3) The fact that the position is sometimes present in cases in which there is no gross lesion of the cerebellum, is a further reason for not attaching too great importance to the position assumed by the head. In conclusion, it may be said that as an additional and confirmatory sign of cerebellar tumour the position assumed by the head is of value, but too much importance should not be attached to its presence alone, or when opposed to symptoms which have been shown to possess greater diagnostic value.

PARALDEHYDE DELIRIUM AND THE EFFECTS OF PARALDEHYDE WITH REMARKS UPON OTHER HYPNOTICS.—*Probst* (*Monatsch. f. Psychiatrie u. Neurologie*, Bd. XIV. No. 8) reports a case. A woman, aged thirty-eight, who had had the paraldehyde habit for many years, using it by day to quiet nervousness as well as for a hypnotic at night, was admitted to the hospital in a state of stupor. She had in the previous thirty-six hours taken 150 grains of paraldehyde without producing sleep. She was anxious, groaned continually and threatened suicide. She had constant vomiting. Her temperature was subnormal. On the second and third days there was profuse perspiration and polyuria and acetone was present in considerable quantities in the urine. Muscular twitchings and hallucinations of sight and smell were present on the fifth day. The day following she commenced to improve and soon completely

recovered. Probst believes paraldehyde to be the least dangerous hypnotic and mentions having observed doses of fifty and sixty grains being taken without ill effects.

PATELLAR REFLEXES IN HYSTERIA.—Nonne (*Deutsche Zeits. f. Nervenhe.* Bd. XXIV.) reports two cases of hysteria in which there was absence of patellar reflexes. The first case was that of a woman of 24, who successively had "*grande hystérie*" pseudotabes hysterica, hysterical apoplectic hemiplegia, monoplegia hysterica superior and monoplegia hysterica inferior with areas of anesthesia. The loss of knee jerk was constantly present for four weeks, during which time the patient thought she had no legs. The second case was that of a steward of 30, who suffered from paraplegia hysterica. The knee jerk was absent for some weeks. The article contains a review of the literature.

OPTIC NEURITIS IN INFECTIOUS DISEASES.—Flatau (*Muenchener medizinische Wochenschrift*, No. 28, 1904) reports a case of optic neuritis accompanying paratyphoid fever. The patient, a male of 22, was admitted in a stuporose condition with headache and a temperature of 39.8° C. There was a negative Widal reaction but later the patient's serum agglutinated the paratyphoid (type B). Owing to the symptoms present on admission an ophthalmoscopic examination was made. This revealed a double optic neuritis. Thirteen days later the eye grounds were normal and all subjective symptoms had disappeared.

He calls attention to the fact that Rosenberg had experimentally produced optic neuritis in animals by the injection of the toxin of the typhoid bacillus. Uhthoff found 17 out of 253 cases of optic neuritis accompanying infectious diseases were associated with typhoid. In 1902 Groenouw collected 20 cases from the literature associated with typhoid fever. These cases show that the occurrence of an optic neuritis, during the course of an infectious disease alone, does not mean a meningitis, but that it may be due to a toxic disturbance.

---

### Miscellaneous.

ACETOZONE IN THE TREATMENT OF SUMMER DIARRHEA.—The experiments of Novy and Freer with Benzoyl-Acetyl-Peroxide (Acetozone) show that it is markedly germicidal as far as the ali-



mentary canal is concerned. Its administration to the rabbits resulted in the "complete sterilization of the contents of the stomach." In numerous instances neither bouillon tubes, nor agar, showed growths, although the control animals furnished abundant cultures. They demonstrated that aqueous solutions of Acetozone can be given internally without harm, and they, therefore, inferred that this powerful germicidal agent would be valuable in the treatment of summer diarrhea and other infectious enteric diseases.

THE OPERATIVE TREATMENT for senile hypertrophy of the prostate is summed up in a paper, based upon 145 operations, read by Orwitz before the Northwestern branch of the Philadelphia County Medical Society. He says that the gratifying results obtained by operations in many cases demonstrate that the Bottini operation is one of great surgical value. It is applicable to a large percentage of cases, in which, if properly selected, it has proved to be the safest and best method of relieving the obstruction. A complete prostatectomy is justifiable if performed early, before the individual is broken down in health and secondary complications have supervened. In early operations the results are most satisfactory, recovery rapid, the mortality varying between five per cent. and seven per cent. A complete prostatectomy in feeble elderly patients, with long standing obstruction and secondary complication, is grave and the mortality ranges between fifteen per cent. and eighteen per cent. If the bladder in these cases happens to be hopelessly disabled, the results obtained by the operation are negative. Cases of this description are only suitable for suprapubic drainage.

THE RELIEF OF HAY FEVER.—By contracting the arterioles of the nasal mucous membrane Adrenalin frequently relieves the most annoying symptoms of hay fever, which are chiefly referable to vasomotor paralysis. It must be used topically, best by inhalation, and it is preferable to begin with only moderately strong solutions, which can be increased in strength if judged necessary.

## Louisiana State Medical Society Notes.

---

In charge of DR. ISAAC IVAN LEMANN, Secretary, 163 University Place.

---

OFFICERS—President, Dr. Charles Chassignac, New Orleans; 1st Vice President, Dr. Oscar Dowling, Shreveport; 2nd Vice President, Dr. L. C. Tarleton, Marksville; 3rd Vice President, Dr. J. F. Buquoi, Colomb; Secretary, Dr. Isaac I. Lemann, New Orleans; Treasurer, Dr. M. H. McGuire, New Orleans.

COUNCILLORS—Drs. A. G. Friedrichs, Chairman, 2nd Cong. Dist., 641 St. Charles St., New Orleans; J. J. Ayo, Sec'y., 3rd Cong. Dist., Bowie; P. E. Archinard, 1st Cong. Dist., New Orleans; S. L. Williams, 5th Cong. Dist., Oak Ridge; N. K. Vance, 4th Cong. Dist., Shreveport; C. M. Sitman, 6th Cong. Dist., Greensburg; C. A. Gardiner, 7th Cong. Dist., Sunset.

---

### MINUTES.

Third Day, May 12, 1904.

#### MORNING SESSION.

Meeting called to order by the President at 10:15.

The Secretary read his Annual Report.

New Orleans, May 12, 1904.

*To the President and Members of the Louisiana State Medical Society:*

GENTLEMEN:—The Annual Report of the Secretary could be easily made a document of indefinite length. A detailed statement of all the work of the past year would be enough to fill a formidable volume, which the monthly reports rendered you under the heading "Louisiana State Medical Society Notes," in our official journal, the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL, have rendered unnecessary. Formerly the major part of the work of the office consisted in sending out notices two or three times a year, editing a volume of Transactions and attending to the business of an annual three-day meeting. This has been entirely changed. The detailed work which has been rendered necessary by the unusual conditions of the past year has far exceeded all expectations. The business affairs of the Society have required attention almost every week day during the year, and owing to the peculiar needs of the organization campaigns and the necessity for finding some time for continuous work without interruption from the demands of private practice, a great deal of night work has been necessary. Were it not that the past year's conditions were exceptional, no physician in active practice could act as your Secretary.

The Louisiana State Medical Society was chartered June 10, 1903, and is now a legally incorporated organization.

Parish societies organized in accord with our Charter and regulations have been chartered as our official representatives and component parts in 38 parishes. Two organized parish societies have not been chartered. One did not file proper papers in time for this meeting and one is working under a form of constitution not in accordance with our form of government.

Some of these parish societies are in flourishing condition and their meetings are interesting and well attended. Some are practically dead. Your Councilors have given you their reports on these matters.

I submit tables showing physicians of the State, members and non-members, classified by parishes and professional status, based upon information gathered from the office of the State Board of Health, the reports of parish society secretaries, the reports of councilors, correspondence with members, and sundry other sources.

I do not believe the figures to be absolutely correct. They are as correct as could be obtained thus far. We are indebted to the State Board of Health for courteous co-operation in obtaining these statistics. Their records are now being kept up to date with so much more thoroughness than before that the assistance they render is valuable.

The foundations of all statistics to be compiled by your Secretary are to be the reports furnished by parish secretaries, and as the component societies complete details of formation and settle down to regular work, the reports of the secretaries will become increasingly valuable.

It will take time, perhaps several years to get a practically correct classified census of the physicians of Louisiana.

The correspondence of this office has increased amazingly, and to facilitate handling it, the latest improvement in filing devices, a vertical system has been installed and indexed. The old flat file system has been exchanged for this.

Our system of numbered vouchers and stubs keeps accurate classified records of expenditures, and will be submitted, with other financial details, to the Auditing Committee, with your permission.

A classified card index of the physicians of the State has been completed, as far as data furnished this office will permit. This index is being changed continually, as new information is received.

The increasing business affairs of this growing organization are now too many and complex to be handled in a room used for any other purpose. It is too much to expect any office to continually stow away and spread out its papers and paraphernalia, like a disappearing cannon. The Orleans Parish Medical Society, itself cramped for room, has generously and courteously given the State Society a home for the last two years, and this, too, at considerable

inconvenience to itself. I urge that a special vote of thanks be tendered for this.

In this connection your attention should be called to the fact that the Orleans Parish Medical Society has recently purchased a three-story brick building for its permanent domicile and is preparing to repair it at considerable expense. I urge that the Secretary be authorized to arrange with them for a room to be used exclusively for the Louisiana State Medical Society. This is imperative, as the work demands some undisturbed place.

Postage and printing have been used liberally during the year, and the results justify the expenditure.

The plan of keeping all members constantly informed on all important matters through the medium of our official organ, the *NEW ORLEANS MEDICAL AND SURGICAL JOURNAL*, has been one of the most important factors in creating and maintaining interest. I wish to state emphatically that our results could not have been obtained without it and to recommend continuance of the present plan.

Our thanks are due to the editors, Drs. Chassaignac and Dyer, for their co-operation.

We also owe an expression of appreciation to the recently founded "*Medical Recorder*," which has from its initial number gratuitously lent powerful aid to the work of the Society.

The *Tulane Phagocyte* has also published notes of our affairs and aided in stirring up enthusiasm.

In many details our present Charter and Regulations have proven too vague or impracticable, as must be the case in any new form of government. I suggest a Committee on Revision, to report next year.

For one thing, more time should elapse between returns from Parish Secretaries and the Annual Meeting.

The Transactions for 1903 are in the printer's hands and the Secretary hereby accepts responsibility for their delayed appearance. He is a practicing physician and there are limits to his ability to turn out work. The Transactions have been laid aside for more essential things.

In this connection I suggest that we endeavor to have our Transactions appear in our official organ and dispense with the annual volume. The advantages are more publicity to papers, a stronger official journal, and less total expense for better results.

The file of Transactions is now complete, with the exception of four years, 1878, 1881, 1882 and 1889, and these we are trying to procure.

The Society's funds, with the approval of the President, have been liberally used to promote the Society's interests. The results show that we are in better financial condition than ever before.



The Assistant Secretary, Mr. George Augustin, has served faithfully and well. I could not have carried on the work without an assistant, and I wish to express my appreciation to him.

As to the officers and members of the Society, it would be invidious to attempt to give adequate recognition to all those who have heartily co-operated with your Secretary in the most trying year's work which has so far fallen to this office.

The enthusiasm and zeal of your President has made it possible to do many of the things which have been done, and to him I tender heartfelt thanks for unfailing courtesy and consideration, for inspiration to efforts, for staunch support, and for active and efficient co-operation.

For this year's meeting the Society owes much to the energy and efficiency of the Chairman of the Committee on Arrangement, Dr. L. G. LeBeuf, whose work speaks for itself. It has been a pleasure to work with him.

But the keynote of the year has been the increasing interest of the individual members of the Society. Their awakening to the needs of the hour and their response has done the work. In them is the strength of this organization.

And, finally, fellow members of the Louisiana State Medical Society, I hereby regretfully tender my resignation as your Secretary. The work has come to have an interest and even fascination for me that makes me loath to lay it down. But I have already given more of my time and attention than I can well afford, and must devote more henceforth to my individual interests.

Respectfully submitted,

WM. M. PERKINS, M. D.

*Secretary.*

DR. CHASSAIGNAC moved that the report be accepted and referred to a Committee to be appointed by the President, this Committee to report upon recommendations made by the Secretary. Seconded and carried.

The President appointed Drs. Chassignac and E. D. Martin as this Committee.

DR. HAYS moved that a vote of thanks be extended to the retiring Secretary for his faithful devotion and untiring efforts in behalf of the Society during his regime.

DR. LEBEUF seconded the motion and said that no man was in better position than he to know of the continuous, faithful and efficient work done by the retiring Secretary in effectively discharging the many arduous duties falling upon him. Carried.

On motion reading of the minutes was temporarily dispensed with.

The Nominating Committee reported as follows:

*To the President and Members of the Louisiana State Medical Society:*

We, your Nominating Committee, recommend the following officers for the ensuing year:

For President—Charles Chassaignac.

For First Vice President—Oscar Dowling.

For Second Vice President—Leo Tarleton.

For Third Vice President—J. F. Buquoi.

For Secretary—P. L. Thibaut.

For Treasurer—M. H. McGuire.

For Councillors—First Congressional District, P. E. Archinard; Second Congressional District, A. G. Friedrichs; Third Congressional District, F. R. Tolson.

As member of the Board of State Medical Examiners to succeed Dr. F. A. Larue—F. A. Larue; Homer Dupuy.

Delegate to the American Medical Association—Wm. M. Perkins; Alternate, J. B. Elliott, Jr.

We suggest that the Society vote Dr. Wm. M. Perkins an honorarium of \$500.00, for faithful and efficient services rendered during the last twelve months.

We recommend New Orleans as the most available place for the next meeting, and suggest as the time the second Tuesday in May, 1905.

Respectfully submitted,

JOHN J. ARCHINARD,

*Chairman.*

O. DOWLING,

*Secretary.*

After some discussion DR. BRUNS moved to take a rising vote on every man proposed by the Nominating Committee. Seconded and carried.

The following officers were then put in nomination and elected:

President—Dr. Charles Chassaignac, of New Orleans.

First Vice President—Dr. Oscar Dowling, of Shreveport.

Second Vice President—Dr. L. C. Tarleton, of Marksville.

Third Vice President—Dr. J. F. Buquoi, of Colomb.

For Secretary the names of Drs. P. L. Thibaut and I. I. Lemann were put in nomination, and voted on by ballot, by which Dr. Lemann was elected.

Dr. M. H. McGuire was nominated Treasurer and by rising vote was unanimously elected.

Dr. P. E. Archinard was elected as Councillor for First Congressional District.

For Councillor for Second Congressional District, Drs. A. G. Friedrichs and M. J. Magruder were nominated and voted on by ballot, by which Dr. Friedrichs was elected.

For Councillor for Third Congressional District, Drs. F. R. Tolson and J. J. Ayo were placed in nomination. By rising vote Dr. Ayo was elected.

It was moved that the Secretary cast the ballot of the Society for those nominated, in order to make all elections "by ballot," in accordance with the Charter. Seconded and carried.

The Secretary cast the ballot of the Society for the above officers.

It was moved that the Constitution and By-Laws as submitted by the American Medical Association be adopted as the Constitution and By-Laws of the Louisiana State Medical Society. Seconded.

After discussion, DR. PERKINS moved that a committee be appointed to report at the 1905 meeting, and before as legally necessary to amend our present Charter, on the motion printed in the 1904 program:

"Resolved, That the Constitution and By-Laws of this Society be amended by the substitution of the Constitution and By-Laws recommended by the American Medical Association."

Carried.

DR. ISADORE DYER, Chairman of the Committee appointed to report on communication from Charity Hospital of Louisiana Alumni Association, reported as follows:

*To the President and Members of the Louisiana State Medical Society:*

Your Committee appointed to report on the Resolutions submitted by the Charity Hospital of Louisiana Alumni Association, after a careful review of the suggestions therein contained, beg to submit that the following be adopted, in the form of resolutions, to be forwarded to the State Legislature and to the Governor of Louisiana, through your proper committee:

1st. That this Society believes that its representation as citizens of the State of Louisiana and interested directly in the administration of the Charity Hospital in New Orleans, entitles it to the

privilege of indicating a proportion of the Board of Administrators.

2. To this end the legislative act or acts governing the Charity Hospital to be so amended as to direct that at least three of the Board of Administrators shall be selected from the medical profession of the State.

3d. That the selection should be identical with the mode employed in the appointment of members of the State Board of Medical Examiners, namely: That this Society shall suggest to the Governor two names, from which he will select one to fill any vacancy which may occur among the medical representatives on the Board.

Respectfully submitted,

ISADORE DYER, M. D.,

*Chairman.*

HENRY DICKSON BRUNS, M. D.

ALLAIN EUSTIS, M. D.

New Orleans, May 12, 1904.

On motion report was adopted and its suggestions were heartily endorsed.

DR. E. D. FENNER, New Orleans, read by title his paper on "A Case of Sarcoma of Femur; Disarticulation by Wyeth's Method; Recovery."

DR. I. I. LEMANN read a paper entitled "Extra-Uterine Pregnancy; Its Diagnosis; Report of Cases."

DR. C. J. MILLER read a paper entitled "The Principles Underlying the Successful Treatment of Cystocele."

On motion adjourned.

#### AFTERNOON SESSION.

Meeting called to order at 2:35.

The Secretary read reports of Special Committees as follows:

New Orleans, La., May 12, 1904.

*To the Officers and Members of the Louisiana State Medical Society:*

GENTLEMEN:—Your Committee appointed to consider recommendations embodied in the Secretary's Annual Report, beg to submit our approval of the two suggestions, apart from the one already acted upon in reference to change in Constitution.

The first is that referring to the securing of a room from the Orleans Parish Medical Society for the business purposes of this Society.



The second is regarding the publication of our proceedings in the official journal and saving some of the expense of publication, while increasing their publicity.

We recommend that the proper officials be instructed to carry out these measures.

(Signed)

E. DENEGRE MARTIN,

CHAS. CHASSAIGNAC,

*Chairman.*

On motion, above was adopted.

REPORT OF SPECIAL COMMITTEE ON RESOLUTIONS SUGGESTED BY A.  
M. A. CONCERNING EYES OF SCHOOL CHILDREN.

*Whereas*, The value of perfect sight and hearing is not fully appreciated by educators, and neglect of the delicate organs of vision and hearing often leads to disease of these structures; and,

*Whereas*, It is the sense of the American Medical Association that measures be taken by boards of health, boards of education and school authorities, and, where possible, legislation be secured looking to the examination of the eyes and ears of all school children, that disease in its incipency may be discovered and corrected; therefore, be it

*Resolved*, That the Louisiana State Medical Society declares itself fully in accord with the above, endorses it, and shall use its influence to urge the proper authorities to take the proper steps, so that the Society shall again assert its importance as a factor for the preservation and betterment of the public health.

M. FEINGOLD, M. D.,

*Chairman.*

On motion, adopted.

The Auditing Committee asked for by the Treasurer and Secretary was announced as follows: Dr. M. J. Magruder, Dr. I. I. Leman, Dr. Allain C. Eustis.

The Council announced that they had reorganized and elected Dr. A. G. Friedrichs Chairman and Dr. J. J. Ayo Secretary of the Council.

DR. R. E. McBRIDE, Chairman of the Section on Materia Medica and Threapeutics, transmitted a letter regretting his inability to attend the meeting.

Various members sent regrets at being absent from the meeting.

DR. F. J. MAYER offered the following resolution:

*Whereas*, The annual recrudescence of anthrax in certain sections of Louisiana is threatening the live stock industry of the State;

*Resolved*, That it is the sense of this body that the General Assembly should create a live stock sanitary commission, with punitive powers, to enforce their regulations.

On motion, adopted.

DR. KOHNKE offered the following resolution :

*Resolved*, That the recommendation of this Society be conveyed to the Louisiana Representatives in Congress that all proper efforts be encouraged in favor of the Hepburn Pure Food Bill, and all similar legislation in the interest of pure food and pure drugs.

On motion resolution was adopted.

DR. GESSNER offered the following :

REPORT OF SPECIAL COMMITTEE ON STATE NURSES' BILL.

*To the Officers and Members of the Louisiana State Medical Society :*

The Bill, as presented to the members by the Nurses' Association, is not in its final form; it is in the hands of a lawyer, who is putting it into shape for presentation to the Legislature. For this reason your Committee suggests, and I do move, that the proposed legislation for the registration of nurses be referred to our Committee on Public Policy and Legislation, with full power to act.

Motion seconded and carried.

The Committee on Vital Statistics, DR. E. J. GRANER, Chairman, suggested that this Society co-operate with the State and National authorities, who are attempting to improve the methods of collecting vital statistics, and refer the matter to the Committee on Public Policy and Legislation, with power to act.

On motion such a resolution was adopted.

*(The Minutes will be completed in the next number.)*

## Medical News Items.

---

THE AMERICAN NEUROLOGICAL ASSOCIATION, which meets in St. Louis on September 15, 16, 17, has changed its meeting place to the Planter's Hotel instead of the Fair Grounds, as was planned at first. The sessions will be held from 9 a. m. to 1 p. m. The profession is invited.

THE AMERICAN MEDICAL EDITORS' ASSOCIATION held their 35th annual meeting at Atlantic City previous to the meeting of the A. M. A. Many interesting papers were presented, and applications for membership received. Resolutions endorsing the action of Mr. Bok, the editor of the *Ladies' Home Journal*, in denouncing the use of nostrums and patent medicines, were passed. A committee was appointed to draft a new constitution and by-laws. The following officers were elected: President, Dr. Harold N. Moyer, of Chicago; First Vice-President, Dr. C. E. Pilcher, of Carlisle, Pa.; Second Vice-President, Dr. O. F. Ball, of St. Louis; Secretary and Treasurer, Dr. J. A. MacDonald, Jr., of New York.

THE LOUISIANA STATE BOARD OF MEDICAL EXAMINERS held a special meeting on August 2, 1904, at which Dr. Felix A. Larue presented his credentials from Gov. Blanchard, who recently appointed him to succeed himself for six years. Dr. Larue was re-elected Secretary and Treasurer of the Board. The next regular examination held by the board will be in this city on October 21 and 22, 1904.

AT THE LAST MEETING OF THE STATE BOARD OF HEALTH, held August 1, the following resolution was passed: "Be it resolved, That no quarantine be imposed by the Louisiana State Board of Health unless by a majority vote of members present at the meeting."

AT THE LAST MEETING OF THE TEXAS STATE BOARD OF MEDICAL EXAMINERS, held in Houston, there were 65 applicants, and 28 passed.

THE SANITARIAN HAS BEEN SOLD to the *Popular Science Monthly*. The August number of the *Monthly* contains two articles by physicians.

PERSONALS.—DR. ROBERT S. CARROLL announces the opening of a new Sanitarium in Asheville, North Carolina, for the care of chronic, nervous, and drug cases.

DR. C. M. SHANELY, from Lidgerwood, N. Dakota, who attended the New Orleans Polyclinic last winter, was in the city recently in the interests of bringing a German colony to settle in Southern Louisiana.

DR. W. G. OWEN, of Whitecastle, has been appointed Surgeon General on Gov. Blanchard's staff.

DR. GEO. F. SHRADY, editor of the *Medical Record* for the past thirty-eight years, has resigned his post. The new editor is Dr. Thos. L. Stedman.

DR. W. W. CRAWFORD, of Hattiesburg, Miss., who lost his infirmary by fire, is rebuilding.

DR. J. L. DAVIS, recently of Shreveport, has moved to Plaquemine.

DR. S. C. HOLIMAN has left Winsboro and is now located at Harriesburg, La.

DIED.—DR. G. R. HARRIS died at Rayne, La., July 31. Dr. Harris formerly practiced in Claiborne parish.

DR. A. N. H. BROWN died in Algiers on July 30, aged 34.



## Book Reviews and Notices.

---

*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

---

*Diseases of the Intestines and Peritoneum*, by DR. HERMANN NOTHNAGEL, of Vienna, edited, with additions, by HUMPHREY D. ROLLESTON, M. D., F. R. C. P. W. B. Saunders & Co., Philadelphia, 1904.

This volume, the eighth of Saunders' American edition of Nothnagel's Practice, is one of especial interest to the practitioner. The volume is by Dr. Nothnagel himself, and is edited by Dr. Humphrey D. Rolleston, who has added fresh sections on intestinal sand, sprue, ulcerative colitis, and idiopathic dilatation of the colon.

The section which treats of intussusception is of considerable value. On the subject of appendicitis the author writes: "The statements of surgical enthusiasts might almost lead the reader to believe that most of the cases of perityphlitis die unless they are operated upon; that this is erroneous is shown by statistics, especially remarkable data of the Vienna Pathological Institute; among about 45,000 autopsies performed in twenty-seven years there were only 148 (*i. e.*, 0.3 per cent.) deaths from perityphlitis, some of which were from intercurrent peritonitis; and it should be noted that during twenty of these years (1870-89) operations for perityphlitis were comparatively rare. There is now a reaction against over-operating, and thoughtful surgeons are discussing the problem now, as many did toward the end of the above period: When are we to operate for appendicitis? This query implies that these cases cannot be treated according to any rigid rule, and that every one must be considered on its merits. Taking into account the mass of communications on this subject, it is impossible in a text-book to criticize the individual opinions of all observers. . . ."

Further, Dr. Northnagel says that while the operation, as a rule, is followed by favorable results, and many surgeons never record a death unless there is diffuse peritonitis or sepsis at the time, it must not be forgotten that they are performed by men of great experience, at thoroughly equipped hospitals, and that it is doubtful whether the results would be as good if the inexperienced felt bound by current scientific opinion to operate in every case.

The book is representative of modern medical thought in this branch of practice.

STORCK.

---

*Social Diseases and Marriage*, by PRINCE A. MORROW, A. M., M. D. Lea Brothers & Co., New York and Philadelphia, 1904.

Beginning with highly interesting "preliminary considerations," the writer takes up next the question of "gonorrhea and marriage," and finally "syphilis and marriage." The latter subject is fairly familiar to educated physicians at least, but the importance of gonorrhea to the husband and, more particularly to the innocent wife is only beginning to be understood.

Hence this book deserves a large circulation among those who pretend to occupy the position of advisers in matters sexual and hygienic. It is well-written, bears the stamp of authority, and is brought up to date on all subjects considered.

If we were hypercritical we might lay stress on the advisability of more careful proof-reading of the French terms, as the genders and accents have been frequently misplaced. However, this does not detract from the real value of Dr. Morrow's work, which is interesting, practical and valuable.

C. C.

*A Treatise on Diseases of the Rectum, Anus, and Sigmoid Flexure*, by JOSEPH M. MATHEWS, M. D., LL. D. D. Appleton & Co., New York.

It is with great pleasure that we have looked through this, the third, edition of Dr. Mathews valuable work. Having heartily commended the previous editions, it is only necessary to say, on this occasion, that the book has been revised, enlarged, and brought up to the knowledge of the present day.

The author calls attention to some operations original to himself, some of which, however, are to be classed more as modifications than as entirely original operations. It is to be regretted, for the sake of completeness, that Fowler's rectopexy or Tuttle's modification of it for pro-lapsus are not mentioned, nor angiotripsy for internal hemorrhoids.

At any rate, this is a valuable book. No one doing rectal operations can well be without it, and the general practitioner can always use it as a safe guide.

C. C.

*The Doctor's Leisure Hour*, arranged by PORTER DAVIES, M. D. The Saalfeld Publishing Co., Chicago, Akron, New York, 1904.

A collection of jokes, good, bad, and, indifferent. The character of the book can be described best by quoting a paragraph printed under the preface: "For copyright and other privileges the editor returns thanks to the publishers of *Life*, *Puck*, *Judge*, and *Punch*; to the Century Co.; Chas. Scribner's Sons; Dodd, Mead & Co.; Harper & Brothers; S. S. McClure Co.; Curtis Publishing Co.; Dr. Weir Mitchell; Jno. Kendrick Bangs; Opie Read; Tom Masson; Jerome K. Jerome; Edwin L. Sabin; Alice Earle; Rev. Jno. Watson; Mary Wilkins; Mackenzie Bell; Dr. Andrew Smith, and Ruth McEnery Smith (?)."

Yet the volume is worth having and may often chase away the blues or change the channels of your thoughts, for some of the good jokes are very amusing, and some of the others are bad enough to be distressing.

C. C.

*"Analysis of the Sexual Impulse—Love and Pain—The Sexual Impulse in Women,"*—third volume in series—*"Studies in the Psychology of Sex,"*—by HAVELOCK ELLIS, L. S. A. (England). F. A. Davis Company, Philadelphia.

In the first part the author discusses the various theories which have been offered in explanation of the sexual impulse, dismissing them all as inadequate, and sees that there are two constituents in that impulse; the first he calls the *process of tumescence*, the second the *process of detumescence*; by these terms he means not only the vascular congestion but also the underlying and fundamental nervous charging, in the first instance, and the discharging of the tension thus produced, in the second, thus indirectly leading to the propagation of the race.

The second part is devoted to the study of why and how love inflicts and seeks to inflict pain, also why love suffers and even seeks to suffer it.

The special characters of the sexual impulse in women are considered in the third part, including the differences between men and women in this respect. He quotes, in illustration of a point, a case reported by Block in this JOURNAL.

Finally, the sexual instinct in savages and the development of this instinct are described in two appendices.

The author presents the various topics in a scientific manner, and his work should be highly interesting to the earnest student. C. C.

*Manual of Materia Medica and Pharmacy*, by E. STANTON MUIR, Ph. G., V. M. D. F. A. Davis Co., Philadelphia, 1904.

This manual is of handy size, superfluities having been omitted. It is interleaved for notes, hence is such a book as the student will find convenient for the class room. It is written more for the student of pharmacy than for the medical student. The information given is accurate and concise. The metric system is used primarily. STORCK.

## Publications Received.

**P. Blakiston's Son & Co.**, Philadelphia, 1904.

*A Text-Book of Human Physiology*, by Albert P. Prubaker, M. D.

**Lea Bros. & Co.**, New York and Philadelphia, 1904.

*System of Practical Surgery*, by E. von Bergmann, M. D.

**William Wood & Co.**, New York, 1904.

*The Reference Handbook of the Medical Sciences*, Vol. VIII, Ed. by A. H. Buck.

### Miscellaneous.

*Twenty-Seventh Annual Report of the Board of Health of the State of New Jersey, and Report of the Bureau of Vital Statistics*, 1903.

*The Index Catalogue of the Library of the Surgeon General's Office U. S. Army*, Vol. IX.

## Reprints.

*Modern Synthetic Medicinal Products*, Part II, by Dr. Virgil Coblentz.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)

FOR JULY, 1904.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	7	4	11
Intermittent Fever (Malarial Cachexia) .....	2	2	4
Small Pox.....			
Measles .....			
Scarlet Fever .....			
Whooping Cough .....			
Diphtheria and Croup.....			
Influenza .....			
Cholera Nostras.....	1		1
Pyemia and Septicemia .....		1	1
Tuberculosis.....	41	48	89
Cancer.....	18	4	22
Rheumatism and Gout .....	3		3
Diabetes .....	1		1
Alcoholism .....	1		1
Encephalitis and Meningitis.....	6	5	11
Locomotor Ataxia.....	1		1
Congestion, Hemorrhage and Softening of Brain.....	12	9	21
Paralysis .....	3	2	5
Convulsions of Infants .....	1	1	2
Other Diseases of Infancy .....	22	5	27
Tetanus .....	3		3
Other Nervous Diseases .....	1		1
Heart Diseases.....	30	25	55
Bronchitis .....	2		2
Pneumonia and Broncho-Pneumonia.....	14	5	19
Other Respiratory Diseases.....	1	2	3
Ulcer of Stomach.....	2		2
Other Diseases of the Stomach .....	1	2	3
Diarrhea, Dysentery and Enteritis.....	33	23	56
Hernia, Intestinal Obstruction.....	5		5
Cirrhosis of Liver.....	3	1	4
Other Diseases of the Liver .....	3	1	4
Simple Peritonitis .....	2		2
Appendicitis.....	2	1	3
Bright's Disease .....	30	17	47
Other Genito-Urinary Diseases.....	4	1	5
Puerperal Diseases .....	2		2
Senile Debility.....	14	9	23
Suicide .....	3	3	6
Injuries.....	25	19	44
All Other Causes.....	16	9	25
TOTAL.....	315	199	514

Still-born Children—White, 32; colored, 23; total, 55.

Population of City (estimated)—White, 233,000; colored, 84,000; total, 317,000.

Death Rate per 1000 per annum for Month—White, 16.22; colored, 28.43; total, 19.45

## METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure ..... 30.06

Mean temperature ..... 81.

Total precipitation ..... 8.49 inches

Piling direvarection of wind, south.



# *New Orleans Medical and Surgical Journal.*

---

VOL. LVII.

OCTOBER, 1904.

No. 4.

---

## Original Article.

---

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints may be had at reasonable rates if a **Written** order for the same accompany the paper.]

---

### Removal of the Lens in High Myopia.

By HENRY DICKSON BRUNS, M. D., Professor of Diseases of the Eye in the New Orleans Polyclinic; Surgeon in charge of the Eye Department of the New Orleans Eye, Ear, Nose and Throat Hospital.

When removal of the lens for the relief of high myopia was first suggested, it struck me at once as a reasonable and beneficent proposition. During the past nine years I have removed the lens nine times for the improvement of this condition, and so far nothing has occurred to change this prepossession.

Very high myopia is as yet comparatively rare in the Southern United States, where the population is largely agricultural, fairly homogeneous and for the most part American for three or more generations. Another reason why I have not operated more frequently, is that I believe the cases in which we can conscientiously recommend operation must be carefully selected.

From the first, the prophylactic value of the operation so occu-

---

\*Read before the International Congress of Ophthalmology at Lucerne, Switzerland, September, 1904.

pied my attention as to exclude from consideration any benefit that might accrue to confirmed victims of the disease. I mean that my imagination at once pictured all the good that might be done to an adolescent, whose M. had already reached or past twelve D., by a simple and safe procedure, long thoroughly understood by all ophthalmologists, because of its common employment in many conditions. On the other hand, my own and others' bitter experience in the performance of serious operations upon middle aged or elderly myopes made me recoil from pursuing a path so frequently crossed by disappointment and doubt.

When, during the meeting of the ophthalmological section of the American Medical Association in New Orleans last year, this subject came under discussion, I was surprised to find that many distinguished confrères had been regarding the matter from a different standpoint, and practiced a method which seemed to me needlessly hazardous, sometimes upon cases from which I should have expected little and dreaded much. One or two of these distinguished fellow practitioners, after doing me the honor to visit my clinic, and seeing one or two of the cases herein reported, were very gracious in their expression of approval. It is this which has emboldened me to bring the subject to your consideration by this modest contribution in the hope that discussion by this learned body may aid in fixing the real value, proper limits and best methods of an operation, which marks a great, indeed the only radical advance, in the treatment of a most unhappy condition.

Let us consider first the case of a middle aged or elderly myope. In such a case, although the M. may be sixteen D. or more, should the pathological changes be confined to the development of a conus only, glasses in all probability will give vision quite satisfactory to the patient; at all events, the disease will have done its worst, and is not at all likely to be progressive, or at the most, very slowly so. Here removal of the lens is not to be thought of; even at forty the expectation of life is already diminished and the chances of serviceable eyesight lasting out the patient's remaining years are excellent. From now on, in almost any walk of life, the patient will probably with each year lead a less exacting, a more and more sheltered life. At any rate, the nature of his employment will have been the same for many years past, and we are in a position to see

that it has produced no very dreadful consequences. We may safely await the actual appearance of cataract, should it ever come, before suggesting an operation, that may be a risky one, entailing pain and discomfort, dislocation of fixed habits, confinement to bed and his room and loss of income during this period. And just herein lies another very important consideration in determining whether or no we shall advise operation. Although observation of the course of traumatic cataract has convinced me that discission, if carefully done, may often be safely and efficiently practiced long past the arbitrarily fixed age of twenty-five or thirty, nevertheless, it will hardly be denied that at thirty-five it begins to be doubtful, and becomes impracticable at forty or over. By that time the lens has become hard enough to make absorption tediously slow and the dangers of irido-cyclitis and glaucoma great. Extraction, then, is the only operation that we can recommend in this class of cases, and extraction of cataract, let alone extraction of the clear lens, in an eye already highly myopic, is certainly an operation to be risked only under the spur of necessity. Again, in extracting the transparent lens, what method shall we adopt? If we choose moderate preliminary discission, in the hope of enjoying later the advantage of having an opaque lens to deal with, a long experience with this method of treating immature cataract has taught me, that not only are we most likely to be disappointed in the degree of opacification that will have taken place by the time injection and pain force us to proceed with the extraction, but that we then labor under the disadvantage of having to extract from an irritated eyeball instead of from a quiet one. The sudden advent of glaucoma, the great difficulty of clearing away all cortical debris, and the probability of a long post-operative struggle with irido-cyclitis, occlusion, and even exclusion of the pupil, all render the operation dangerous, and its after treatment long and trying to both operator and patient. Nor is the plan of thoroughly breaking up the lens and its subsequent evacuation through a peripheral incision a whit more attractive. Here again the suddenness and severity with which irido-cyclitis or glaucomatous symptoms may set in, even in young persons, where only a rather free discission has been made, is well illustrated in cases No. 1 and No. 4, herewith reported. When such accidents occur in persons of middle age or over, and in eyes more

or less damaged by a long standing M. of excessive degree, they may cause us more than a bad quarter of an hour. There then only remains as an alternative the extraction of the transparent lens at the first sitting, and in spite of its difficulties this is the operation I should choose; though, I am happy to say, I have never been obliged to perform it for this purpose. While this may be accomplished safely and beautifully by operators of extraordinary skill (see case of Dr. Robin here appended), yet it seems to me undeniable that in the hands of the average operator it must prove vastly more dangerous than an ordinary extraction. The difficulty of so completely removing all cortical as to insure prompt and painless healing, with a permanently open pupil, is so great that lavage will probably have to be resorted to, to secure such a result; the prolonged manipulations will greatly increase the traumatism and the risk. I once had to remove first one, and later the other, spontaneously dislocated lens from the anterior chamber of a young girl afflicted with high M., and in spite of using every precaution, and having each time performed an operation which appeared to be highly successful, inflammatory reaction destroyed both eyes.

Now, if all this be true of a class of cases we have been considering, namely, persons of middle age, or over, afflicted with an excessive M., to be sure, but with one that has produced no worse consequences than some impairment of vision and a moderate conus, how much more dangerous must the operation be when performed under far less promising conditions? I mean upon persons middle aged or elderly, whose excessive M. is associated with disease of the choroid, with fluid vitreous, together with; perhaps, true posterior staphylone. Has not the experience of each and all taught us how beset with difficulties and dangers is the extraction of senile cataract in such cases? Have we not all seen instances in which extraction had been practiced uselessly—I had almost said ruthlessly—upon such unfortunates? Is, then, the extraction of the clear crystalline to be recommended under like conditions, unless necessitated by most imperative reasons? And yet, owing probably to the operation being still regarded too exclusively as a last resort, this is a class upon whom it seems to be often practiced. Small wonder that the frequent happening of detachment of the retina and other lamentable sequelæ should, in the eyes of many, have



cast upon a truly bold and helpful operation an almost unbearable reproach.

But when we turn to consider the remaining class, the class of young or comparatively young people, whose M., though excessive, has brought about as yet no pathological condition, how different the picture! How beneficent the results; and how simple the means by which they may be obtained! The future of a young person between the ages of ten and twenty, already afflicted with M. of twelve D., or more, is almost certain to be a dark one. We know that the malady will almost surely progress and bring with advancing years unhelpable blindness or a purblindness almost as bad. We are now almost as certain that the removal of the lens can stop all this and endow these children with a vision clearer and wider of range than they could otherwise ever hope to enjoy. The history of our oldest cases, and above all, the noteworthy case of Harlan (appended hereto), seems now to assure us of this beyond peradventure. These in the hey-day of youth, anxious to see, to experience, to learn all the new of life, are those who will receive with the greatest delight the improvement of vision bestowed. The sweeping aside of the veil that was gathering before their eyes ere they become accustomed to see, as through a glass darkly, men as trees moving; before a turning away from chosen pleasures, pursuits and ambitions, has either dulled or embittered, is the renewal of hope for many. Who among us has not been surprised at the apathy, nay, the antipathy, with which some elderly myope has received for the first time a glass doubling or more than doubling his vision? How seldom do we perceive such a state of mind in the young! And these results are to be obtained, not by the risky plan of rapidly breaking up the lens, and afterwards extracting through an incision in the limbus, but by the safe and well understood method of careful, repeated discissions. For the first, though the more speedy and therefore the more showy method, entrains suffering, and the dangers of irrido-cyclitis, infection, longer healing period of the larger wound, and, even in young people, glaucomatous rise of tension. Any one can readily imagine the miserable month spent by the surgeon in conducting to moderate success such a case as No. 1, and even then the suffering and mutilation inflicted and the deformity of the eye resulting were truly lament-

able; while in case No. 4 the pain of the patient and the anxiety of the surgeon are not to be lightly regarded. It is bad to lose an eye upon which an operation to restore sight has from necessity been made; but to be instrumental in destroying a well-seeing eye by an operation submitted to solely upon our recommendation, and by reason of the confidence a fellow creature reposes in us, is indeed a calamity that must give us pause. But if restraining our impatience for the sake of safety, we proceed by gradual discissions, how small the risk, how trifling the pain inflicted. If we make, as we should in all cases, our first discission cautiously, of small size, so that we may have the chance of seeing how the eye will tolerate this traumatism; and then waiting till every trace of injection and irritability has disappeared, make our next attack upon rather bolder lines, we shall have the satisfaction of conducting our case in almost every instance, if not *cito*, at least *tuto et jucunde* to a truly brilliant result. At worst we shall have the consciousness of knowing that we have done our possible to lead the patient safely and painlessly to the goal for which he set out, solely upon our confident recommendation.

I submit, therefore, that there are three classes of myopes for whose benefit the operation of removing the lens may be considered:

1. Extreme myopes of elderly or middle age, in whom the pathological changes do not exceed the production of conus. In these the operation is unnecessary except for particular reasons, as in our case No. 2. They can usually be assured of useful vision, that will outlast the remainder of their lives, by properly adjusted glasses. As a rule, the danger of the extraction will outweigh the benefits conferred, for these persons will be least appreciative of the improved vision that may be obtained.

2. Extreme myopes of elderly or middle age, in whose eyes extensive pathological changes have taken place. Here the operation is virtually contra-indicated. Only exceptional and imperative reasons should lead us to undertake it. The dangers of extraction are very great.

3. Extreme myopes between the ages of ten and twenty-five years of age. The prophylactic value of the operation is very high, for without it the patient is almost surely doomed to a purblind

middle and old age. The operation can be very safely and painlessly done by cautiously repeated discissions. Vision is usually at once greatly improved as to kind and degree. Length of time is not to be considered in comparison with the horror of destroying a healthy, useful eye in an attempt to improve vision or obviate a danger that the patient may never live to encounter. It should never be forgotten that the patient consents to such an operation without motive of any kind other than our recommendation and the faith he reposes in us. One eye only should be operated on at a time, and a long interval should elapse before we allow ourselves to operate upon the fellow eye; so that every opportunity may be afforded to judge of the degree and permanency of the result. We have good reason to believe that the benefits conferred are permanent<sup>1</sup>.

#### CASES.

CASE 1. White school girl, aged twelve years, of good general health, came to the clinic January 14th, 1895. She cannot see well unless she brings things very close. Cannot tell when she first noticed this. Has had glasses, but they did not give satisfaction. V., R. E.=4/200, with 20 D.s=20/50; L. E.=5/200, with 18 D.s=20/50, doubtfully. Ophthalmoscope shows pronounced conus each eye. She was placed in charge of one of the assistant surgeons, who gave potassium iodide gr. 10 t. i. d., and advised removal of right lens.

January 25. Atropine in right eye.

January 30. Pupil well dilated; the surgeon broke up the right lens thoroughly with the needle under cocaine anæsthesia.

January 31. Little reaction and no pain. Lens thoroughly broken up and opaque. Atropine instilled and ordered to be used twice a day at home. Tn.

---

<sup>1</sup>Drs. Wurdeman, Murray and Black of Wisconsin, U. S. A. from a study of their own and collected cases (see the *Annals of Ophthalmology*, April, 1899, and *Transactions of the section on ophthalmology of the American Med. Assn.* at its fifty-fourth annual session, held at New Orleans, May, 1903) arrive at much the same conclusions as I have from my limited experience with the operation, and from the side light thrown by twenty years of experience in private and hospital practice in the extraction of cataract in complicated cases, in the ripening and extraction of unripe cataracts, in the extraction of wounded or dislocated lenses and in the correction of the refraction and muscle balance in myopias of all kinds and degrees.

February 6. Tn. Very moderate circumcorneal injection. Lens being absorbed above and below.

February 13. Same surgeon removed two-thirds of lens substance with Lippincott's syringe, but lost a little vitreous in so doing. Atropine and bandage.

February 14. Bandage very loose. Wound healed, but shred of vitreous in the wound. Eye painful last night. Atropine and bandage.

February 15. Iritis with hypopyon. No pain. Removed shred of vitreous. Ordered atropine and hot bathing every hour.

March 26. Eye too soft and flushing readily. Pupil occluded and iris drawn towards incision made February 13.

April 18. Free iridotomy. Anterior chamber filled with blood.

May 5. Blood not quite absorbed; iridotomy closed. For two days after the last iridotomy the eye was very painful.

July 8. Dr. Bruns made iridotomy down and inwards, at right angles to stretched fibres of iris, with small von Graefe knife, under chloroform anæsthesia.

July 9. Little blood in the anterior chamber. Little reaction, and no vision.

July 21. A small opening in the iris remains, but there is still some obscuring membrane behind it.

August 5. A second and more extensive iridotomy at same spot, discising the obstruction and enlarging the coloboma, is made, under chloroform by Dr. Bruns.

August 6. Anterior chamber filled with blood. Ordered frequent bathing of eye.

August 13. Blood beginning to clear away.

August 24. Blood has disappeared. No vision.

September 8. No blood in anterior chamber. The false pupil, situated down and inwards, almost round and about  $\frac{2}{16}$  of an inch in diameter, looks clear. V.=6/200.

October 29. V., R. E.=15/200 with -3s.=20/50.

January 7. Glasses satisfactory. R. E.=20/50: L. E. 10/200. Can read Sn. No. 1 at eight inches with left eye.

This case seems noteworthy because:

1. It is the first of the kind reported from the far South, I believe.



2. It is evident that the operator made too free a discission at the first operation. In all such cases the first operation should be slight and tentative.

3. It was a mistake to have become impatient over the progress of absorption after the lapse of fifteen days only. The loss of an essentially healthy eye, having highly useful vision, as the result of an operation intended to improve that vision, must be regarded as an unmitigated misfortune. In such a case the element of time should be allowed no consideration; the safest, and only the safest method, is to be followed. There is no doubt, I believe, that discission is far safer than any of the methods of extraction, and so long as absorption is progressing favorably no effort at extraction, either with or without suction or washing, should be undertaken. It is to be remembered that in cases in which one or more discissions have been made the posterior capsule has, in many been either penetrated or ruptured, and a corneal incision is likely to invite prolapse of the vitreous. In this case the posterior capsule was evidently intact, as no prolapse followed the incision, but in using the Lippincott syringe the operator, in an unguarded moment, allowed the nozzle to press too far backward and so caused the loss of vitreous. Great care must be taken in washing out cortex with this instrument to keep the point of the nozzle against the posterior surface of the cornea and allow the regurgitating fluid to do the work.

4. The three iridotomies made before success was obtained shows how much may be done in such cases by cautious perseverance and persistence. The failure of the first was due to its not being made at right angles to the direction of greatest tension. The second and third were made by what, for lack of a better name, I and my assistants have been wont to call the "someset operation" (with Graefe's knife), elsewhere described. The first operation failed because the opening was too small and fine, false membrane (fibrin?) spread itself over the new pupil. The field of operation was small, and the execution of the manœuvre very difficult, but the last operation was successful by piercing and cutting the false membrane and by so enlarging the artificial pupil that the fibrin of the extravasated blood was not able to bridge it over and give rise to a new membrane. The very slow progress of such cases and

the patience that must be often exercised in conducting them to a successful termination is well illustrated by the course of this case after the last iridotomy. It was twenty days before the blood was completely gone from the anterior chamber; thirty-four days before any vision was obtained; eighty-five days before the final result, 20/50 was had. We could never get the patient to read any ordinary sized print, at any distance, with any glass before the operated eye, though with -3 s. before the unoperated one she read Sn. No. 1 at eight inches; nor could we account for the phenomenon.

The operation for the removal of the lens in high myopia seems to me a most reasonable one and one that time and a greater accumulation of experience should prove a most beneficent one. The progress of high myopia is, the pathological basis aside, according to all our theories, dependent upon the excessive use of the longitudinal fibres of the ciliary muscle or the excessive use of the extrinsic muscles in convergence; probably upon both. Removal of the lens at once abolishes accommodation and by suitable lenses we can remove the near point to any distance that we please, and so render the effort of convergence much less violent. In the case of a person with extreme myopia in one eye only, the other being but moderately affected, lenses which fully correct the defect of each eye are so dissimilar as to be unsatisfactory, ill-balanced, intolerable. By removal of the lens from the ultra-myopic eye, lenses of much the same strength can be used, general excellence of vision is much increased and comfort greatly promoted. In such a case the patient will depend for near vision on the myopic eye, or a pair of spectacles can be arranged for near work, in which the near point of the aphakic eye is made by means of a convex lens to correspond with that of the moderately myopic one.

The foregoing case and the two following were published in 1898 and 1899 in Volumes XV. and XVI. of the *American Journal of Ophthalmology*. The comments made at the time are given unchanged as they illustrate the progress of personal experience with the operation in, what seems to me, a usefully instructive manner. The other cases are now published for the first time.

CASE 2. A white married woman, twenty-one years of age, red-haired, blue-eyed, florid, large, and of good general appearance and health. March 16th, 1897. Patient complains that right eye has

been troublesome for three or more weeks. From her description of the appearance of the eye she has had attacks of ciliary irritation and hyperæmia, with tenderness and pain. Vision, R.E.=20/c, L.E.=20/LXX.; there is now ciliary injection of right eye. Atropine is instilled in both eyes; ophthalmoscope shows in right eye high myopia, a myopic staphyloma to the temporal side of the disc, and atrophy and irregular distribution of the choroidal pigment. Left eye is myopic, but otherwise normal. The refraction, under atropine, is found to be: R.E.,=16s-3c. ax.  $15^{\circ}$ =20/LXX.; L.E., -3c. ax.  $165^{\circ}$ =20/XX. Discission of the lens of right eye was advised.

March 24, 1897. A moderate discission of the lens capsule was made under cocaine by Dr. Robin, first assistant surgeon of this department. Atropine instilled.

March 25, 1897. Eye looks well; little reaction; no pain. Pupil kept dilated with atropine.

April 7, 1897. Under cocaine, Dr. Robin broke up lens thoroughly with knife needle. Atropine every three hours.

April 9. Some ciliary injection; no pain; no tension. Atropine continued.

May 1, 1897. Eye free from irritation; lens thoroughly broken up and being absorbed slowly. Atropine continued.

June 2, 1897. Patient can see to count fingers with right eye. Another thorough discission.

June 5. No reaction. Continued atropine.

July 6, 1897. All cortical substance absorbed, some capsule remaining in pupil. Vision R. E.=20/cc.

July 7. An incision was made in corneal margin with keratome and the capsule removed with forceps. Slight escape of vitreous. Atropine and a pressure bandage.

July 9. Wound healed; some reaction. Atropine every four hours and hot water bathing.

July 14. Very little injection remaining; no pain.

July 10. Eye looks well. Vision with +1s.=20/LXX.

December 14, 1897. Vision R.E.=20/c, L.E. 20/xx doubtfully. Right eye, no redness; pupil oval, with long diameter horizontal. Javal shows: R. E., 3 c. ax.  $105^{\circ}$ =20/L, L.E., -1.50 c. ax.  $165^{\circ}$ =20/xx, and the patient is discharged improved.

December 20, 1898. More than a year after the operation, patient was seen again. The right eye looks the same; there is no injection; the eye has not become more enlarged or prominent; the pupil is black and oval in shape; there is no pain nor tenderness, nor has there been since she was discharged a year ago. Vision, R.E.=20/cc; +3 c. ax.  $105^{\circ}=20/\text{LXX}$ . practically the same as it was upon discharge, making allowance for difference of place and illumination. There is slight ex- and hypophoria. An ophthalmoscopic examination shows the media clear and the choroid and the staphyloma about as they were a year ago.

This patient seems to me to have been benefited decidedly. In the first place, at the expense of a simple, and but slightly painful operation, she has been entirely relieved of the recurring attacks of pain with injection in the right eye, a condition that was greatly incapacitating her and rendering existence more or less miserable at the time she applied for relief. It is impossible, moreover, to foretell to how evil a state, to what pain and loss of time this progressive myopia with recurring ciliary hyperemia might finally have led. In the second place, the entire relief of the right has greatly improved the vision of the left; it has mounted from 20/LXX. without a glass, when first seen in December, 1897, to 20/XXX. in December, 1898. At the same time, it must be remembered that this failing, irritable and irritating eye has been converted into a quiet and stable one, capable of affording a very useful degree of vision should a calamity at any time overwhelm its fellow eye. All of this tends to confirm the favorable *a priori* opinion I had formed of this operation, and which I expressed in reviewing my first case, reported in this Journal (October, 1898, page 313).

CASE 3. E. K., a mulatto girl, twenty-two years of age, of good general appearance, came to the clinic on March 9th, 1897, complaining that she was "very near sighted." Vision R.E.=5/cc, L.E.=15/cc. Javal's instrument shows in R.E. 2 D. ax.  $75^{\circ}$ , L.E. 2 D. ax.  $90^{\circ}$ . R.E. with 16 s.-2 c. ax.  $165^{\circ}=20/\text{c}$ , L.E., with 16 s.-2 c. ax.  $180^{\circ}=20/\text{L}$ . The ophthalmoscope shows a pronounced posterior staphyloma in each eye. The removal of the right lens is advised. Patient placed in charge of Dr. E. A. Robin, the first assistant surgeon of this department.



March 19. Dr. Robin did, under atropine, a small dissection with a Knapp needle.

March 20. No reaction; no pain; lens cataractous; atropine.

April 2, 1897. Lens being rapidly absorbed.

May 5, 1897. Under cocaine thorough dissection with a von Graefe knife.

May 7. Eye looks well; atropine freely.

June 9, 1897. Very little cortical remains; needled thoroughly. Capsule seems loose in pupil.

July 3, 1897. Large piece of capsule in pupil hanging over into the anterior chamber. Advise its removal.

July 6. V., R. E., =20/c, with +2.50 s=20/LXX., L. E.=15/cc, with glass =20/L.

July 16. V., R. E.=20/LXX., and no glass; improved. Discharged.

There can be no doubt of the great improvement in this case. An eye affected with progressive myopia and posterior staphyloma, to which a -16s.-2 C. could only give a vision of 20/c., is in four months' time, by an operation, causing neither pain nor the loss of a day from the ordinary avocations, brought up to a vision of 20/LXX. without any glass—almost double the vision given by the best possible glass before operation. Moreover, we have every reason to believe that we have removed the causes that were acting to produce a gradual but inevitable loss of sight; does the average extraction of the lens for senile cataract, does iridectomy in glaucoma do more? I believe strongly in the future of this operation, though until it shall be well established that no remote ill effects follow, I should prefer to operate upon one eye. In the three cases upon which I have operated up to this time I have chosen the worst eye of the two.

Here the case of Dr. H. H. Harlan (Atlanta meeting of the American Medical Association, Section on Ophthalmology, *Journal American Medical Association*, June, 1896, p. 184) should not be forgotten. A woman forty-five years of age had the misfortune to lose her left eye by progressive myopia. At the age of thirteen, however, she had had the good fortune to have an injury to the right eye, causing traumatic cataract and ultimate absorption of the lens. Thirty-two years afterwards; at the time the vision of

the left eye was lost, the sight of the right eye was 20/L without any glass and there was no fundus trouble apparent. Would an early operation, asked Dr. Harlan, have saved the left eye? In the light of this case, I most firmly believe so.

CASE 4. T. B., white servant girl, aged 16, of good general health. From the age of 5 years her eyes have been weak, and she cannot read well. On February 18, 1899, atropine was put in both eyes:

R. V. (a)=20/70 with—14 D. S.=20/50, some of.

L. V. (a)=20/70 with—14 D. S.=20/50.

Ophthalmoscope; marked conus: M=15 D. S.

Advise discission of lens for myopia.

March 1, 1899. Under cocaine discised anterior capsule of lens.

March 2, 1899. Very slight reaction.

March 8, 1899. Under cocaine made a thorough discission of lens.

March 9, 1899. Some reaction. Pupil dilated one-half.

March 10, 1899. Pupil dilated to the maximum; injection moderate; no pain. The lens is thoroughly broken up and a good deal of cortical has escaped into the anterior chamber.

March 18, 1899. Progress satisfactory.

March 21, 1899. Yesterday, at 5 p. m., she began to complain of pain in the eye, and of the eye running water. She had headache and vomiting all night and this morning. The pupil is dilated: there is ciliary injection, and T.=+2. Performed paracentesis of the anterior chamber, removing a good deal of cortical substance. Bandage.

March 21, 1899. At 8.30 p. m. was called to the patient's home and found her suffering, with the tension high. Performed paracentesis with keratome and evacuated a great deal of cortical substance, giving immediate relief.

March 22, 1899. Eye looks better. Ointment of mercury and belladonna on forehead.

March 30, 1899. Doing nicely; absorbtion going on rapidly.

April 13, 1899. R. V.=20/100. About one-third of the pupil is clear.

May 9, 1899. R. V.=+3.50 D. S.+2 c. ax. 120°=20/30.

June 20, 1900. In R. E. performed discission of thin wrinkled capsule dividing it vertically.

June 22, 1900. No reaction; doing very well.

June 24, 1901. R. with +3 D. S.  $\odot$  +1.50 c. ax.  $120^{\circ}=20/40$ .  
L. V.=20/100 with -14 D. S.=20/50.

July 3, 1902. L. E., under cocaine, made moderate discission.  
R. V. with +3.50 D. S.=20/30.

July 5, 1902. Doing well.

October 23, 1902. Under cocaine, thorough discission of lens.

November 3, 1902. Doing well.

February 23, 1903. Absorbtion going on well and nearly complete.

May 13, 1903. R. V.=20/70 with +4 D. S.=20/40.

L. V.=20/70 with +4 D. S.=20/40.

December 4, 1903. R. and L. with +3.50 D. S.=20/30.

R. and L. with +7 D. S.=Sn. No. 1.

When this patient first came to the clinic her unaided vision was only R.=3/200, L.=20/100. The course of the two eyes after the operation illustrates well the great advantage of proceeding slowly and cautiously.

CASE 5. L. N., a mulatto school girl of 12 years of age, came to the clinic on November 4, 1902. She says her sight has always been poor. R. V.=20/70. L. V.=20/70. Under atropine, R. with -10 D. S.=20/70, L. the same.

November 20, 1902. Under cocaine discission of left lens.

November 21, 1902. Pronounced reaction; pupil not dilated; anterior chamber not fully restored; lens becoming opaque. Atropine frequently and continued bandage.

December 1, 1902. Doing well.

January 24, 1903. Nothing left but some capsule occupying part of the pupil. L. V. (a) without a glass, =20/70.

February 25, 1903. L. V.=4/200 with +7 D. S.=20/40. Advise operation on the other eye.

March 5, 1903. Moderate discission of right lens.

March 6, 1903. Complains of pain; some reaction.

March 14, 1903. Under chloroform, made incision upward and outward with keratome, and evacuated cortical matter.

March 16, 1903. Much injection; pupil round and well dilated, the anterior chamber being restored. Continue bandage.

March 11, 1903. Discontinue bandage. Order argyrol 10 per cent. every three hours.

June 1, 1903. R. V. with +650 D. S.=20/30. L. V.=the same.

November 25, 1903. R. V.=20/100. L.=20/70. Both pupils are perfectly round, black and clear. R. V. with +650 D. S.=20/50. L. with +6 D. S.=20/40.

CASE 6. F. B., a white school boy, aged 14, came to the clinic September 5, 1902. He says that his eyesight has been poor ever since he can remember. R. V.=10/200. L. V.=20/200.

September 19, 1902. Under atropine, R. V.=4/200 with -6 D. S.=20/200. L. V.=4/200 with -13=20/70.

January 15, 1903. Under cocaine, made discission of left lens cautiously.

January 20, 1903. There is no reaction and only a small opening in the anterior capsule of the lens.

April 23, 1903. Thorough discission of left lens.

April 21, 1903. Doing well.

June 13, 1903. L. V. with +4 D. S.=20/50.

March 2, 1904. R. V.=8/200, and with the best glass only 20/100. L. V.=20/100, and with +3.50 D. S.  $\odot$  +0.75 c. ax.  $90^\circ$ =20/30, with +6/50 D. S.  $\odot$  +0.75 c. ax.  $90^\circ$  he reads Sn. No. 1 at 14 inches.

The Javal instrument showed R. 0.50 ax.  $90^\circ$ ; L. 1 ax.  $90^\circ$ .

CASE 7. C. F., a white clerk, aged 21, was admitted July 23d, 1902. For eight years he has known that he does not see well. R. V.=20/200. L. V.=20/200. Under atropine, each eye required -14 D. S. V.=20/60. Advised removal of one lens.

August 21, 1902. Made moderate discission of left lens under atropine.

September 11, 1902. Discission of capsule in left eye.

November 12, 1902. Absorption seems to be at a standstill.

December 4, 1902. Under cocaine, made free discission of left lens.

January 16, 1903. Has not been here for a week. The pupil is contracted and full of cortical matter.

March 3, 1903. Absorption going on nicely.

July 21, 1903. L. V.=16/200 with +5 D. S.=20/50.

After this the patient did not return.



*Dr. E. A. Robin's Case of Dislocation of Lens into Anterior Chamber in High Myopia. Recovery after removal with Scoop.*

R. H. McM. Aet. 34, lumber checker by occupation, came to the clinic on March 23, 1901, complaining of defective vision, and a bulging of right eye, interfering with complete closure of lids. We found a large equatorial staphyloma of right eye, the vision reduced to light perception. The left eye was found, under atropine, to be highly myopic, the vision with correcting lenses: —13s  $\odot$  —2.50 c. ax.  $15^\circ$  being only 20/LX. Vision without glasses 20/CC. Javal showed an astigmatism of 3 D. axis  $120^\circ/30^\circ$ .

We ordered above correction for left eye worn constantly and advised enucleation of right eye.

March 29, 1901. Right eye enucleated under chloroform with no accident.

April 6, 1901. Patient discharged improved.

May 7, 1901, or a month later, he returns complaining of intense pain and total loss of vision in left eye, coming on suddenly on previous day. We found severe injection of ciliary region, pupil dilated to maximum, tension enormously elevated, the lens dislocated into anterior chamber. Vision is reduced to faint light perception. Under cocaine we immediately proceeded to remove the lens with scoop, and succeeded only after losing a large quantity of vitreous; eye was bandaged securely. Two days later, removed bandage; eye doing well; healing processes progressing favorably; atropine and bandage. Bandage is removed every other day and atropine instilled; progressing nicely.

On May 22, fifteen days after operation, we find corneal wound healed with small prolapse of iris; counts fingers at four feet. Bandage continued.

May 28. Applied actual cautery to prolapse of iris under cocaine and bandaged.

June 5. Eye looks well. Vision with +7s  $\odot$  +3c. ax.  $180^\circ$  = 20/XL well with +10s  $\odot$  +3c. ax.  $180^\circ$  = Snellen No. 1.

July 15. Javal ophthalmometer showed 12 D. ax.  $170^\circ$ . L. E. V +4s  $\odot$  +8c. ax.  $170^\circ$ , 20/XL with +4s added to this glass = Snellen No. 1. Ordered these glasses in reversible frame for far and near. Discharged two days later decidedly improved.

*Published in the New Orleans Medical and Surgical Journal, March, 1902.*

This case was seen two years after the operation, and the condition of the eye and of vision remained the same.

---

---

## Louisiana State Medical Society Proceedings.

---

[EDITED BY PUBLICATION COMMITTEE.]

I. I. Lemann, M. D., Chairman.

---

### Complications of La Grippe.

By DR. J. B. ELLIOTT, JR., of New Orleans.

Before taking up in detail the study of the complications of la grippe I think it best that we should review the history of the disease, its etiology, bacteriology and symptomatology so as not to confound it with so many conditions classed erroneously as influenza. In past years, and at present, la grippe is serving as a cloak for much ignorance on our part.

The first great pandemic occurred in 1510, A. D., and spread slowly over the whole world; the second in 1580; the third in 1729-1733. The last great pandemic occurred in 1889-90, and commenced, as far as can be ascertained, in Russia. It was believed for centuries that the spread of influenza was independent of human intercourse, and was so declared by Collins as late as 1899. It was supposed to be aeriform, but the fact that each epidemic has traveled more rapidly than the last (not faster, however, than our modern methods of travel) compels us, even without the definite finding of the germ, to believe that personal contact is the main cause of its spread. The case of Vladivostock, the famous Russian stronghold in Asia, stands as a proof of this, for no case developed at that point until the spring of 1890, after the arrival of the first steamer, and numerous similar cases are on record.

Finkler says: "We can positively state now that influenza is a contagious disease, and can therefore be spread only by human intercourse; that it may be carried by inanimate objects is difficult of proof.

The incubation period is placed at from two to six days, and numerous examples are cited by Finkler in support of this fact.

Throughout the world influenza is more prevalent during the winter months, and Bell claims that this is due in part to poor ventilation in houses and street cars.

Pfeiffer, in 1892, proved conclusively the presence of the influenza bacillus in all cases of true influenza, and from numerous investigations has drawn the following conclusions in regard to its life history:

First—Any development of the bacillus of influenza outside the human body is impossible.

Second—The spread of influenza by dried or powdered sputum can occur only to a very limited extent

Third—Contagion is conveyed by recent still-moist secretion from nasal and bronchial mucus membrane of influenza patients.

Pfeiffer never found the influenza bacillus in the blood, and proved that it was never carried by dogs, cats or other domestic animals. The bacillus, as described by Pfeiffer, is short and narrow, with rounded ends (size of mouse septicæmia), and stains with a diluted Ziehl-Nielson or Czenzyuski's solution.

Weichselbaum, Neisser, Kruse, Wasserman, Finkler and others have confirmed the truth of the Pfeiffer discovery.

We must bear in mind in studying the bacteriology of influenza that we will not find the germ always in pure culture, but constantly associated with the pneumococcus streptococcus and staphylococcus, for, as Neisser well says, influenza is symbiotic in character. We must not therefore depend on our examination of sputum, and I have demonstrated this fact in my wards during the past winter. Coming to a study of the pathology of influenza, we are first struck with the change taking place in the respiratory tract. Ribbert, who has made a most extensive study of the conditions of the mucus membrane of the upper-respiratory tract, claims to find in every case of influenza a marked cellular infiltration of the mucous membrane, with a tendency to advance into trachea and bronchi. The true pathology of grippal pneumonia is still a matter of controversy.

Pfeiffer claims that the pneumonia of influenza is a pure catarrhal condition always commencing in the smaller bronchi and

then spreading to the lobules; that these lobules are not necessarily contagious; that little fibrin is present; that the interstitial tissue is always more or less involved, and that when we find whole lobes involved it does not negative the fact that the original invasion was catarrhal. Antvecht, Wasserman and Frankel coincide in this opinion, the last named laying especial stress on the absence of fibrin in the consolidated area.

Osler says: "The true influenzal pneumonia is most commonly lobular or catarrhal, less often croupous," and holds that all anomalies mentioned by writers as peculiar to influenza are found in any large series of cases of pneumonia.

Andrews declares that the pulmonary form of influenza is due to lowered arterial pressure from paresis of vagus and diminished elasticity of pulmonary vesicles.

Elliott believes that the grip-lung is a vaso-motor paralysis and differs from true croupous pneumonia, in that croupous pneumonia has a brief period of active congestion followed by rapid exudation and consolidation giving crepitant rales and bronchial breathing in forty-eight hours, while in influenzal pneumonia or grip-lung we find a long continued passive blood stasis unaccompanied by rales. Elliott holds, moreover, that those cases of consolidation lasting for weeks, and even months, are due to interstitial and peribronchial thickening.

The symptoms of uncomplicated influenza are well known; the suddenness of the attack; the severe headache; pain in bones; chilly sensations; great depression; intermittent pulse; rapid rise of temperature, with an equally rapid fall; white, thickly coated tongue and catarrh of upper air passages combine to make the diagnosis unmistakable. The "Complications of La Grippe" is, however, the subject under discussion, and I shall devote myself to a simple recital of cases seen by me, taking up the different systems seriatim.

*The Respiratory*—White male, aet 30; family and personal history good. Was taken suddenly with chilly sensations, pain in throat, severe headache, great depression, aliphonia and fever. On examination I found temperature  $102\frac{1}{2}^{\circ}$  F.; uvula long and oedematous; posterior fauces scarlet in color; much swollen and covered with a thick yellow exudate membranous in character;



sclera injected; lung and heart normal. This condition lasted for five days. Fever disappeared on third day of attack; aphonia marked for a week, with pain on swallowing. One examination of exudate from throat was made and streptococci found. Was this a simple pharyngitis? I hardly could think so; the depression, fever, pain were all too great. I called it influenza. In three days after the development of this attack, the patient's children were both in bed with catarrhal involvement of the bronchi, one child having a slight broncho-pneumonia. On the tenth day the patient's wife went down with a typical attack of la grippe.

CASE No. II. Colored male, aet 28; Ward 32, Charity Hospital. On entrance gave history of having been sick nine days with pain in side; previous history and family history negative. On examination found well-built, coal-black negro 5 feet 7 inches in height, weight 140 pounds, respirations 30 per minute, pulse 110, temperature 102° F., fauces red, uvula cedematous, constant cough, pain in left side, apex beat of heart pushed a little to the right, no murmurs, slight friction sound just above apex. Physical signs, pulmonary, were as follows:

*Inspection*—Lack of expansion over left lung, except at apex anteriorly.

*Palpation*—Absence of fremitus over left lower lobe posteriorly, with slight increase over lower portion of upper lobe anteriorly.

*Percussion*—Flatness over left lower lobe anteriorly and posteriorly, with dullness over lower portion of upper lobe anteriorly.

*Auscultation*—Absence of all voice sounds over left lower lobe posteriorly, with distant bronchial breathing over lower portion of upper lobe anteriorly.

The right lung was doing its double work nicely. The fluid from left pleural sac was gradually absorbed in about two weeks. Examination of sputum at first showed only pneumococci, but later influenza bacilli appeared in great number and continued to be found even after patient was up. At my last examination I could still find evidence of the thickened pleura and consolidation of upper lobe anteriorly.

This is but one example of many similar cases seen in the last few winters.

In the case just given influenza bacilli and pneumococci were both found. Why, then, should we call these cases grippal and not simple pneumonias? I contend that the physical signs are not the same in the two diseases.

The gradual development of consolidation, the absence of distinct chill, the prolonged fever, the infrequency of rapid respiration, the solid lung lasting weeks, the absence of rusty colored sputum, the resolution without the presence of moist rales, the partial and not total involvement of any one lobe at a time, all point to something other than a lobar pneumonia.

CASE No. III.—White male, aet 45; walked to office; had been sick about ten days and still felt very weak; had hacking cough with no expectoration; gave history of having had no distinct chill or rusty colored sputa, only chilly sensations and fever and great prostration. On examination I found heart normal, except for slight intermittency. Lung solid in mid-axillary region of left side, about size of an orange, with dullness, bronchial breathing and bronchophony; no rales. Two weeks later the dullness had almost disappeared; no rales present.

Coming to a study of the heart complications in la grippe, we find two causative theories advanced. One, that the weakness and intermittency is due purely to the involvement of the central nervous system; the other, that these phenomena are due to a direct poison acting on the heart muscle. As an example of a typical grip-heart, I will cite the following case:

White male, aged 16 years, family and previous history excellent; was taken suddenly sick with chilly sensations, pain in throat, aphonia, found temperature 101°, pulse 90, complained of feeling intensely weak. On examination of heart and lung found nothing abnormal. On second day found no fever, but a marked intermittency of pulse, with slight brachycardia, still much depressed. This condition lasted for one week; there was no dilatation of heart or sign of any myocardial change. I have seen several such cases in the past few years, and in every case these conditions of intermittent pulse and extreme prostration have been the most prominent symptoms. In one case the intermittency has lasted for ten years, and in another for three years. Evidently these cases are due, not to a direct poisoning of the heart muscle,

but to an interference with the nervous inhibition of the heart. The question again arises, why should we call these conditions grippal when no examination was made to prove the presence of the influenza bacillus? I claim that we must depend on clinical signs and not on the microscope in such cases. These grip-hearts occurred in all ages, gave no history of alcoholism or of infectious diseases and were all ushered in with chilly sensations, fever, coryza and prostration. Ebstein strongly emphasizes the fact that the absence of the Pfeiffer bacillus does not negative a diagnosis of la grippe. Caldwell draws attention to the greater number of deaths from anaesthetics during grip epidemics, while Leeds reports a case of acute dilation of the heart on the second day of an influenzal attack, followed by syncope and death.

Under the head of nephritic complications I must report a case seen some two months ago:

White male, aged 24 years, family and personal history good; was taken suddenly with chilly sensations, slight cough, pain in throat, fever 101; on second day noticed swelling around eyes and general puffiness of face, urine high colored and scanty. I saw the patient for the first time on the third day of his attack; found on examination a slight bronchitis of the large tubes, pulse slow and flabby, no murmurs over cardiac area, face and feet edematous. Patient had voided only 12 ounces of urine in previous twenty-four hours; was very restless and prostrated and great pains in head. On examination of urine found specific gravity 1028, about 10% by volume of albumen, no casts, no blood, no sugar; temperature was 102° F.; throat red and uvula cedematous. I at once had patient surrounded with hot bottles, gave large dose of calomel, ordered citrate of potash 20 grains with 10 min. of tincture of digitalis to be given every three hours and mineral water *ad libitum*. Next morning the temperature was 101°, had passed 36 ounces of urine in twenty-four hours, in which there was much less albumen and no casts; patient was quieter, face not so swollen and headache much relieved. I continued the treatment for four days longer, at end of which time urine was normal in quality and quantity. In this case again I could find no cause save influenza for the attack.

Russell reports a similar case and Brandreth Symonds notes a

marked increase of albuminuria in applicants for life insurance during grip epidemics.

Numerous authorities state that influenza has an especial affinity for the nervous system and every general practitioner has seen evidence of this in the past ten years. I saw two cases of acute mania some three years ago, arising solely from simple influenzal attacks; both cases were in females and both made rapid and permanent recoveries.

I have seen a case of neuritis only recently, undoubtedly influenzal in origin.

White female, aged 33, family history good, personal history good, except for attack of icterus some four years ago; was taken suddenly ill with chilliness, pain all over body, sore throat and fever. Saw patient on second day of attack; found temperature 101; all organs normal; blood normal; diagnosis la grippe. On third day found temperature 100° F.; had now developed intense pain along the course of radial nerve of left forearm and posterior tibial nerve of left leg; throat symptoms had disappeared. This condition continued unintermittently for almost two months, requiring sedatives and warmth locally.

The treatment of the numerous complications of la grippe is too large a subject to be entered upon in the short time at my disposal; suffice it to say that in complicated cases I use quinin and salol for the pains and strychnia and caffein for the prostration and cardiac arrhythmia.

#### BIBLIOGRAPHY.

Finkler, *Twentieth Century Practice Med.*, Vol. XV.

Osler, *Practice of Medicine*.

Bell, *Sanitary Record*, March 15, 1902.

Andrews, *British Medical Journal*, March 16, 1901.

Elliott, *The Climatologist*, August, 1891.

Wood, *American Medicine*, October 17, 1903.

Mackenzie, *British Medical Journal*, November 1, 1902.

Leeds, *British Medical Journal*, January 1, 1901.

Caldwell, *British Medical Journal*, September 29, 1901.

Symonds, *Medical Record*, January 26, 1901.

Albutt, *British Medical Journal*, September 29, 1901.

Earle, *British Medical Journal*, September 29, 1901.



Ebstein, *Münch. Med. Wochenschrift*, March 24, 1903.

Jellife, *Philadelphia Medical Journal*, December 27, 1902.

Lord, *Boston Medical and Surgical Journal*, December 28, 1902.

Michel, *Le Bulletin Médical*, March 20, 1901.

Anders, *Practice of Medicine*.

Loomis & Thompson, *Practice of Medicine*.

Autrecht, *Nothnagel's System of Practical Medicine*.

Russell, *British Medical Journal*, July 29, 1899.

#### DISCUSSION.

DR. J. B. ELLIOTT, SR., of New Orleans—I expect that the majority of those present have heard me before upon the subject of this disease in the lecture room, at least, in the amphitheatre. I do not think the majority, perhaps, heard me thirteen years ago when I read a paper on the same subject before this Association, including my first study of influenza in 1890 and 1891. At that time influenza as a recognizable, distinct, epidemic disease was new to me and the first cases I saw interested me so much and were so peculiar that they fixed my attention and compelled me to a study more accurate than I would have given it had my attention not been so fixed. The substance of my study I embodied in a report in 1891 to this Association. It was published and I have found little more to add to my views except that I have become more confirmed in all the opinions I then held and had worked out during that epidemic. My conclusions were that influenza was undoubtedly a germ disease, the germ entering the blood, producing its toxin and that toxin acting upon the general nervous system; that this effect upon the general nervous system was noticed usually as a general phenomenon during the first two or three days. It meant prostration. Many patients were in bed three or four days during that prostration without any fever and without any organ being involved—simply nervous prostration. This general effect of the toxin upon the general nervous system impressed me so thoroughly that it became a conviction in a few weeks. Subsequent to this first attack it was very noticeable that any patient taking privileges with himself during the first stage by exercise or imprudence, would have what I called a relapse, in which there would be slight chilliness, always an increase in temperature, in-

creased depression, and then came the phenomenon which all recognize, a special attack upon some apparatus or organ. This special attack was usually a secondary phenomenon. With this relapse came not only the poisonous effect upon the general nervous system, but a special attack upon some apparatus, usually the respiratory, though it was not confined to this apparatus. Frequently we found the heart dilated or symptoms of renal trouble, or the digestive apparatus was attacked, and I would warn patients to be careful, so as to avoid these relapses. As to the nature of this effect upon the apparatus, I expressed it at that time in my paper as influenza affecting the general nervous system, causing a nervous depression, accompanied with a special capillary paralysis; I called it a special vaso motor paralysis in some apparatus. If the lung or respiratory apparatus happened to be the organ attacked we would have a dilatation of the capillaries, a blood stasis, and that peculiar condition that I termed a "grip lung," a condition which I have always taught, not from pathological evidence, but from clinical work by which I could demonstrate almost as well as in the dead house, in which we find the lung dull from summit to base and bronchial breathing and bronchophony from summit to base, and yet not a rale, with respiration from 26 to 28. That excludes a pneumonic consolidation absolutely, and recent experiments and studies have shown that this was a true clinical insight at that time. But it is not peculiar to the lung alone, and what I got up to say is that influenza is a disease just as common almost in effects upon any other apparatus. I have seen a patient seized with relapse of grip affecting the spinal cord almost identical with myelitis. I have seen an increase in the size of the liver in two hours from capillary paralysis and no other cause. Up to 1891 I had been practicing in the city only five years and I had never seen a case of mental alienation, but that spring and summer I saw six cases. I would call your attention to the fact that I personally have realized that a good deal of what I have called grip in the last ten years has been looked upon rather as a fad, but it is only because I am convinced that in all these various cases I have seen characterized by those symptoms plus the involvement of an apparatus, and when that has once made its appearance you can recognize the fact that there is not a dis-

ease that will not be complicated by this general and localized vaso motor paralysis.

DR. P. E. ARCHINARD, of New Orleans—I have had occasion to see, every year, cases of poliomyelitis and multiple neuritis, due directly to the effects of the poison of la grippe. When I first saw la grippe I thought there were two forms. I still think so. I think we have in grippe a disease with symptoms localized in the mucous membrane of the respiratory tract, that form of la grippe which we call the catarrhal form. I think there is another form, less frequent, the neuro-muscular form, where the catarrhal symptoms are altogether absent, where the symptoms are muscular and nervous and very well marked. I think the discovery of Pfeiffer gives color to this view. He discovered that the bacillus is confined to the respiratory passages and in the mouth, not elsewhere. In conditions not exactly realized the germ of la grippe secretes a powerful toxin which takes hold of the system and produces its effect on the nervous system and the deeper seated organs, hence the effect on the liver and other organs. I think when we find a way of detecting toxins in the animal organism we will see that such an explanation holds good. We know in the laboratory there are certain germs which are found to grow rapidly and others slowly, and sometimes the latter secrete the more powerful toxins; to this class belong the bacilli of la grippe.

DR. A. A. ALLAIN, of Bayou Goula—In connection with this subject, I will mention a case which was interesting, chiefly on account of the age of the patient and the well marked period of incubation. A child thirteen days old developed influenza-pneumonia; the period of incubation was five days from date of exposure. It made an uninterrupted recovery at the end of twelve days by lysis.

The discussion of Dr. J. B. Elliott, Sr., interested me as a whole, but the statement which attracted me particularly was that the lung gives a dull sound from apex to base, and he connects this phenomena with the existence of vaso motor paralysis. I believe that I have met cases of influenza-pneumonia where dullness was confined to the area of consolidation alone, the rest of the lung giving a normal note.

From a clinical observation only, influenza-pneumonia is, I

think, primarily lobular in all instances, and these affected lobules are not always involved from apex to base, but may be irregularly distributed as at the base first and be succeeded by others situated higher up. I have in mind the case of an aged lady developing influenza-pneumonia, contracted from a similar case twenty days before. Here dullness and other signs of consolidation were limited to an area as large as my hand, situated at the base of the right lung and posteriorly only. The portion of lung anterior to these affected lobules seemed healthy in every particular, so far as physical signs could determine. The percussion note was everywhere else normal.

DR. L. LAZARO, of Washington—The physician is very often to blame for the trouble and disappointment he meets in treating grip. For example, he meets a man who complains of an ordinary cold, and without examination says, "Oh, that's grip." Now, this man gets well without treatment while attending to his work, and later this same physician, called to see the very same man, finds a serious case of grip, and is very much surprised that the patient will not submit to treatment. Of course, he had grip before and got well without treatment. If you want the people to fear this dreadful disease, be more careful in your diagnosis and call an ordinary cold a cold and grip, grip.

DR. T. H. SMITH, of Southland—There is one point not touched upon, and that is the sequelæ, such as laryngitis, tonsillitis, interstitial nephritis, etc. We often find there is an intermission probably of two or three months and other conditions develop. For example, heart trouble, which is one of the hardest conditions to treat. Then, we have many rheumatic conditions develop. The tonsillitis, too, is often of a severe type.

DR. L. M. PROVOSTY, of New Roads—I would like to ask the essayist if it is not a fact that grip is an erratic disease; that there are many changes and varying symptoms; and if it not also a fact that it has such an effect upon the nervous system that there is no fixed symptom at all which will distinguish it. I left a case at home with fever. In this case I would like to have examined the blood; I did not, but I am as sure as can be, without such examination, that it is a case of typhoid fever following grip. I would like to know if it is possible for the two to go together.



DR. H. D. BRUNS, of New Orleans—I would like to know if practitioners have seen lately any of those cases of sudden blindness from grip which I observed quite frequently in the early days of the epidemic. At that time I remember, I was called frequently to see patients who had gone to bed in full possession of eye sight and woke up to find themselves totally blind in one or both eyes. The diagnosis of grip then was not very certain, and only here and there men were beginning to suspect that they were cases of grip, and so they were diagnosticated as purpura and muscular rheumatism, etc. In these cases the blindness was due to a metastatic choroiditis and therefore absolutely hopeless and the patient blinded for life. Of late years I have seen none of these cases, either in the clinic or in the office, after recovery from the general disease. It seems to me noteworthy that this complication is prevalent in the initial attack and not later.

DR. LEBEUF—Was there any nephritis in those cases?

DR. BRUNS—No, there was absolutely nothing in the eyes to cause suspicion of renal disease.

DR. E. D. MARTIN, of New Orleans—One phase that I have not heard mentioned is the terrible effect grip has had during this last season on the mucous membranes and the accessory cavities of the head. I do not know when I have heard of so many cases of sinusitis.

DR. L. G. LEBEUF, of New Orleans—I have seen a number of cases of la grippe with interstitial nephritis as a complication. Two or three cases about the fourth or fifth day had streptococci, which showed in a deposit on the posterior fauces and the tonsils. In one case the nephritis lasted three days and then disappeared, and in the other case the condition cleared up inside of a week.

DR. J. B. ELLIOTT, SR., of New Orleans—From Dr. Allain's remarks I think he must have misunderstood one of my points in speaking of vaso motor paralysis as a secondary effect of the poison on the general nervous system. It is simply to that stasis that I attribute the bronchial breathing and bronchophony of the grip lung. In any apparatus we get at once a vaso motor paralysis, not necessarily an inflammation, but in the lung that state occurs first and it may be some days before the other state occurs. The bronchial breathing and bronchophony occur after the stasis, so while

we might find dullness, we might not find bronchophony or bronchial breathing until two or three days later.

DR. J. B. ELLIOTT, JR., in closing—When Prof. Welch was here last year I asked him if he could tell post mortem an ordinary lobar pneumonia from a true grip pneumonia and he said he could not. In a work on the lung Albrecht makes the statement that in grip pneumonia we do not find post mortem any fibrin whatever. In ordinary lobar pneumonia we find fibrin packed tight. That is the differential point. Another point of Albrecht is that in the grip lung the exudation is beneath the lining membrane of the small tubes; in ordinary pneumonia the small tube is absolutely normal; only the air vessels are involved. In the grip lung we have no rales. Of course, it takes various forms, but there is always an intense depression about grip. A man does not go to bed with an ordinary cold; he may have a little fever, but he is not prostrated. A most common occurrence is the intermittency of the pulse. I have a patient now to whom I had given everything without effect until I had put him on ordinary black coffee—a tablespoonful three times a day—and that is the only way I was able to control the pulse. Grip, of course, forms a toxin in the blood, yet this may not attack the whole of one lobe, but may be confined to a half of the lobe, which proves that it is not a pure lobar pneumonia. Nephritis is due to the toxin also. We usually find hyalin casts, but not granular casts. The attack generally passes off in five or six days, leaving the kidney perfectly healthy.

### **Dental Caries and Popular Fallacies.**

By GEORGE J. FRIEDRICH, M. D., DDS., Chairman Section on Oral Surgery,  
New Orleans.

Caries, the principal disease of the teeth, has existed in all historic ages of the world, for wherever prehistoric human remains have been discovered traces of this disease have been found. All nations and tribes have not all been equally affected, yet no race of man seems to have been exempt; all more or less have suffered from its ravages. There is no disease that is so common or so widespread, or that so generally afflicts the human family. Caries of the teeth is produced by a chemical disintegration of the elements of the teeth, molecule by molecule. This disintegration always begins on the surface of the teeth, usually in some pit, fissure

of other irregularity, at the point of contact of the proximal surface, and about the necks of the teeth. When once begun the destructive process spreads toward the interior of the organ; and as dentine is more readily affected than the enamel, a cavity is formed whose interior is larger than its orifice. If this process is not arrested or checked the whole crown of the tooth, in due time, is destroyed.

When the molecular motion theory of Baron Von Liebig on fermentation was superseded by the brilliant experiments of Pasteur, a new light dawned on the problem of dental caries; for Pasteur conclusively demonstrated that neither fermentation nor putrefactions could progress without the presence of organic germs. Drs. Underwood and Miles, in a paper read before the International Medical Congress, London, in 1881, entitled "Effects of Organisms Upon the Teeth," summed up the following conclusion as the result of their experiment: "We consider that caries is absolutely dependent upon the presence and proliferation of organisms. That these organisms attack first the organic material, and feeding upon it, create an acid, which removes the lime salt; and all the differences between caries and simple decalcification by acids is due to the presence and operation of germs.

"That suppuration of the pulp, and its sequelæ, such as alveolar abscess, depends also upon the successful working of organisms. We feel justified in concluding that the successful excluding of germs would prevent the disease."

This new dogma of the etiology of dental caries was received with queries, doubts and surprise, producing a sensation the like of which probably will not occur again in a life time.

A new field for research and investigation opened up to the profession a plausible theory as to the cause of dental caries; ending the surmises and theories that formerly obtained credence.

Now, let us see what has followed from the above assertions:

1st. "That micro-organisms are constantly present in decaying dentine, as announced by Leber and Rottenstein, has been confirmed.

2nd. "The softening of dentine in caries has been shown to be chemically identical with that produced by certain weak organic acids." (Miller, Jesserich, Benefeld and Black.)

3rd. "Artificially, caries have been produced which under the microscope cannot be distinguished from natural caries, by subjecting sound dentine to the action of these fungi in fermentable solution." (W. D. Miller.)

4th. "Fungi exist in great numbers in the human saliva, and in carious dentine, which have the power to produce acid under conditions which are constantly present in the human mouth. I determined this acid—for one of the fungi at least to be the ordinary ferment of lactic acid." (Dr. W. D. Miller, Berlin.)

In accordance with nature's process in fermentation, the production of lactic acid must ensue in the oral cavity, independent even of the presence of micro-organisms.

All farinaceous grain, the chief food for man and beast, have an inherent organic ferment, that has the power to convert the starch contained in the grain into sugar. In germinating the ferment diastase is evolved; the steps in the process being, first, the formation of soluble starch, then dextrin or gum, which next passes into glucose or grape-sugar, there is usually at the same time produced a small quantity of lactic acid. "At a high temperature in malting this conversion of the sugar into lactic acid is evolved in considerable quantity, if the malt is allowed to cool in a moist state." If this is nature's process of evolving lactic acid outside the mouth, why should not this same process take place in the mouth, where moisture and heat are most favorable to fermentation, and minus any specific microbe?

In 1898 Dr. J. Leon. Williams, D.D.S., F.R.M.S., London, England, read a paper before the British Dental Association, in which he expressed the opinion "that all softening of the enamel is due to the action of acids, and chiefly, or wholly, to acid excreted by bacteria 'in situ,' that the bacteria coating the surface of the enamel cover or invest themselves with a gelatinous substance, underneath which they produce their acids, directly in contact with the enamel and that only acids produced beneath those films are responsible for the beginning of caries." In the *Dental Cosmos*, 1902, May number, there can be found an article headed: "Bacterial Plaques on the Surface of the Teeth," by Dr. W. D. Miller, Berlin. In refutation of the theory advocated by Dr. Williams, Miller doubts that the nature of this film has been determined with



sufficient clearness; that these plaques are of a gelatinous nature, or that they are in any way "glued" to the surface of the tooth. "The version that the films protect themselves externally by a coating of glue cannot, it seems to me, be seriously entertained, there being no evidence of such an arrangement. Besides, if actually present, it would prevent the access of food to the film, without which it could not produce acid or anything else." The presence of a film on a carious surface cannot, however, be taken as evidence in favor of the supposition that this film gave rise to the caries. Caries occur at points which cannot be kept free from accumulation of food, *i. e.*, at points which are not kept mechanically cleansed. Films are likewise found under exactly the same condition and consequently films and caries *must* occur together, but we are hardly justified by this fact in making one of them dependent upon the other.\* Conclusion: "The membrane affords a matrix for bacteria, as well as for minute particles of food and thereby accelerates the process of decay," expresses fairly my present impression regarding the gelatin plaques under consideration.

The foregoing historic summary represents the status of what is known to-day of the etiology of dental caries, but this knowledge does not cover all the lesions to which the teeth are subjected. The teeth are subject to an affection characterized by a loss of substance of the organ, occurring without any apparent cause. It always has its beginning on the surface of the teeth, over a limited space, and very gradually a pit or groove is formed, which steadily widens and deepens, until, in many cases, a large part of the tooth is destroyed. This disease is called erosion of the teeth, by some, chemical abrasion, decay by denudation, etc.

"The etiology of erosion is probably one of the most obscure subjects in pathology. With our present knowledge, it is practically unexplainable. The theory that it is caused by acid mucus is supported by several who have written on the subject. While unsatisfactory in the extreme, there seems to be nothing better to offer,"†—G. V. Black, M. D., D. D. S.

It sometimes attacks only one tooth in the arch, whilst all the rest of the teeth remain intact and unaffected. Another singular-

---

\*The above statements are quoted from *Micro-Organisms of the Human Mouth*. Dr. W. D. Miller, Berlin.

†American System of Dentistry, Litch.

ity to be noted is, that it attacks both the enamel and the dentine, while against ordinary caries the enamel is a protection; its favorite field of action is the labial and grinding surfaces of the teeth, generally leaving the eroded surface perfectly smooth and polished. Fortunately for humanity, this disease is rare and one meets isolated cases only occasionally. When we take into consideration that antagonism is an essential factor of human existence, that motion and life cannot go on without it, that whilst the most active force, the building up process, is going on, the opposing force, or breaking down process, is equally efficient. Hence it follows that it is only when these forces diminish in activity that there is an arrest in dental caries. Statistics conclusively prove this.

Caries of the teeth is essentially a disease of youth, and it is a notable fact that the predisposition to caries diminishes as age advances. One of the reasons for this is that by the time a person has reached the age of eighteen, all points favorable to decay have been attacked, and as we advance in years the teeth themselves become more dense, consequently are better fortified to resist the inroads of decay. The remedies employed to stay the progress of dental caries, as a rule, are mechanical. In its incipiency, in some cases, by filing out the carious spot and polishing the surface so as to leave a self-cleansing space, will answer the purpose. The application of nitrate of silver until a covering or film is deposited on the surface of the carious spot will arrest its further progress, provided there is no depth to the cavity, so that no extraneous substance can remain to dissolve the film in the process of fermentation, which constantly takes place in the oral cavity. When the cavity has advanced to such a degree that neither of the above remedies will apply, obturation must be resorted to. This operation, the *modus operandi* of which I shall have nothing to say, yet, I will dilate upon what it should be and what may be expected of it, if properly performed, and what it should accomplish. The material employed must be inert and indestructible; it must be packed solid, so as to render it impermeable, and secured in such a manner in the cavity that force will be necessary to dislodge it; the material must be left flush with the orifice of the cavity, and finished in such a manner that it can be kept clean. If these conditions are not attained, no hope can be entertained that the oper-

ation will preserve the tooth from further decay. For a filling in a tooth is not a restoration of the part lost through decay, but merely a patching up; and in doing this the oral surgeon performs no radical cure, for he does not remove the cause, which still remains present, ever ready to counteract the operation. The most important operation in dentistry is that of filling. Any one who sets himself up to perform this operation and who is not competent, is, in my estimation, worse than a thief. A thief steals only filthy lucre, while a dentist incompetent to fill a tooth properly adds abuse to injury, and he not only inflicts unnecessary pain, but steals his patient's time and money. He gives assurance that the tooth operated upon is put in a condition of further preservation; with this assurance the patient, although his teeth may give timely warning that all is not as it should be, usually before a competent operator is consulted, caries may continue to progress to such an extent that the vitality of the teeth is endangered, and an irreparable loss to the patient must ensue.

Under the head of popular fallacies it is often amusing to listen to the views expressed in regard to the causes of dental decay; some will put the blame on creosote. "Never had decayed teeth until creosote was applied to relieve pain." Others again give the use of sugar all the credit for the bad condition of their childrens' teeth. The preparation of iron medicinally administered is another scape-goat; also the preparations of mercury; ice water, hot drinks and climate. This is a general reason given by foreigners: "Never heard of such a thing as decayed teeth in the old country." Soft foods, "the foundation for bad teeth." It is a noted fact that the Esquimaux, living on the whale blubber, the tropical oriental with rice diet, and the savage with his forest nuts, grain and dried meats, have each and all equally good masticating organs. Lack of sufficiency of lime in our food—because the "staff of life," the bread as now prepared, is principally composed of starch. According to Dr. Playfair, "Average dietaries" for adults in health, about twenty grams of mineral matter are daily introduced with the food. If such is the case, this only proves that the tissues may be bathed or saturated with lime salts. Yet, if they be not taken up or appropriated, their presence is of no value. Nutrition is a tissue function; the act of this process is

the appropriation from without of the materials which enter into the composition of the living frame, or of others which may be converted into them in the interior of the body. The difference between the protoplasmic elements that originate a tooth and those which originate bone we may never be able to distinguish; yet we know there is a force that directs to formation as certain as intercepted light will cast a shadow. Over this process or affinity we have no control. Germ-potency determines not only the time for the appearance of an organ, but also directs its form and function.

In conclusion—given a perfectly organized denture, an unimpaired nervous system, in a sound body without inherited taint, teeth would never decay as long as this condition was maintained, and that, too, irrespective of climate, peculiar kinds of food, or any external agents which might be brought in contact with them, in the process of mastication. Cleanliness, the daily brushing of the teeth, now considered so essential, would be unnecessary as a preservative measure and be practiced only for its comfort.

#### DISCUSSION.

DR. E. D. MARTIN, of New Orleans—The termination of this paper has disarmed me; I had hoped the doctor would leave something for me to say. There is an old saying that “in a sound body we find sound teeth,” for it is a known fact that even in children with caries, fresh air and hygienic treatment will cure the trouble. In cases of lowered vitality, or where the nerve supply is cut off the tooth loses its vital force and has little resisting power to overcome the bacteria which invade it, and caries begins.

#### A Pectoralis Minimus Muscle.

By S. P. DELAUP, M. D., Chairman, Section Anatomy and Physiology,  
New Orleans.

During the past session at the Tulane Medical College in the laboratory of practical anatomy I came across the following anomaly: A negro subject of well developed musculature presented on the left thoracic wall a third pectoral muscle, a pectoralis minimus. The muscle was fully three inches in length and about one inch in width, entirely fleshy; it arose from the first notch on the left border of the gladiolus, close to the articulation



of the second costal cartilage, and its fibres were directed downwards and outwards and inserted into the outer surface of the cartilage of the fifth rib, overlapping the costal origin of the pectoralis major muscle. The latter muscle presented a shorter origin than the normal; its lowest fibres arose from the fifth rib; its sternal origin barely reaching the border of the sternum.

The pectoralis minor arose from the second, third and fourth ribs. On the right side this muscle was normal.

Anomalies of the venous, arterial, and even the nervous systems are frequent, but of the muscular system are very rare.

While on this subject I wish to call your attention especially to the anomalies of blood vessels. As I have just stated, these anatomical structures present the most frequent deviation from the normal, and the surgeon should not forget this fact when dealing with the surgery of these parts. For instance, in case of an injury of an axillary vein requiring ligation the result of the operation will be materially modified whether the patient possesses a single, double, triple or quadruple axillary vein. Again, it is not uncommon to find a high bifurcation of the brachial artery; indeed, at times, a bifurcation reaching the axillary artery even. Hence the result of operation on blood vessels, particularly of the large trunks, are often influenced by anomalies, and I dare say that the success of many of the procedures have been credited to the operator's skill when in truth the credit should have been given to some fortuitous anomaly.

No discussion.

### Section on Quarantine.\*

DR. J. N. THOMAS, QUARANTINE, CHAIRMAN.

I have no report to make, but in presenting the subject for discussion I want you to state my views, which briefly are these:

That as the question of the conveyance and spread of the disease

---

\* Quarantine, La., May 28th, 1904.

Dr. Wm. M. Perkins, Secretary State Medical Society, New Orleans, La.:  
 Dear Sir:—Owing to the illness of my Chief Assistant, Dr. Thomas Y. Aby, who is now absent on sick leave at Brown's Mills, Miss., I regret to say that it will be impossible for me to be present at the meeting of the Society to act as Chairman of the Section on Quarantine. My friend, Dr. Fred J. Mayer, if present, is not only fully cognizant of every requirement for the successful administration of protective quarantine service, but he more fully knows my views on the subject than any other member of the Society, and I will ask him to represent me.

Very Truly Yours,

JOHN N. THOMAS.

is still a mooted one and that notwithstanding the fact it has been undeniably proven that the female *stegomyia* mosquito conveys the disease, it has not been proven that the disease is not conveyed in other ways.

That while many in the profession believe that the mosquito is the only means of conveying the disease, a large number of the most reputable physicians of the State do not accept this theory, but believe that the disease is conveyed in other ways.

That as long as there is any doubt no quarantine officer charged with the grave responsibility of protecting public health from pestilential disease imported from foreign shores has any right to accept any theory or belief to the discredit of another, but he is in honor bound to give the public health the benefit of any doubt, and to adopt and enforce such measures of protection as will combat the disease from any and every supposed standpoint of origin and conveyance.

Thoroughly believing this to be the safe and proper ground for any maritime quarantine officer to take, at the Mississippi River Quarantine Station we are fighting the importation of the disease from every standpoint.

If by the mosquito, we use sulphur to kill the *stegomyia*; if by a germ, we use moist steam and bichloride of mercury to destroy it; with the question of conveyance in its present doubtful state, I do not consider any other course advisable or safe.

#### DISCUSSION.

DR. QUITMAN KOHNKE, of New Orleans: There is related in biblical history the case of one Demetrius heading an assembly of citizens against the acceptance of the then new doctrine, and Demetrius counselled his comrades to the effect that this new doctrine interfered with their business, which was the manufacture of idols, and the assembled citizens interrupted a certain speaker on a certain occasion by shouting "Long live Diana of the Ephesians." There is danger in following too quickly a new idea, but there is danger, also, in accepting the opinions of those who are wedded to old beliefs; also there is danger in following enthusiasts, who may go far in the directing of revolution or disturbance in favor of a new doctrine or a new theory. Those who are not enthusiasts and

who are not in the business should be the minds that ultimately decide which opinion is correct of any two on a given subject. The discussion in matters of this kind has been markedly spirited between fomites and anti-fomites, between the mosquitoites and the anti-mosquitoites.

To my mind the mosquito transmission of yellow fever is absolutely proven, proven positively and negatively. The experiments in Cuba demonstrated beyond the shadow of a reasonable doubt, that the female *stegomyia* can, because it did, convey yellow fever. Even those who believe in the possibility of stuffs containing the germ accept the theory that yellow fever may be and is conveyed by mosquitoes. On the other hand, those who accept fully the mosquito theory deny the possibility of yellow fever being conveyed in any other natural way. (The hypodermatic injection of contaminated blood need not be considered.) The negative experiments, prove, also, the negative side of the question regarding the conveyance of yellow fever by fomites, and settles the position of yellow fever as mosquito conveyed. Experiments in Cuba were conducted which exposed non immunes to every kind of fomites, to every way in which the germ might be conveyed by stuffs, by supposedly infected articles, and the negative results are as distinct and certain as the positive results. The failure to convey yellow fever by all other means tried in Cuba proves, if it proves anything, that so-called fomites do not carry yellow fever.

There are two ways in which yellow fever may be introduced into a community, one is by the entrance of persons who have been exposed to infection within a period less than five days prior to their admittance, and who may, therefore, be incubating the disease; the other is the admission of infected mosquitoes. If there is any other way by which yellow fever can be carried from place to place it is incumbent upon those who think so to prove it. Those who hold the opposite opinion have proved their contention in experiments in Cuba and elsewhere. Unless the fomites theory can be proved by experiments as complete, as fair, as free from accidental influences as those of Cuba, the fomites theory must be considered disproven. The history of yellow fever, the history of quarantines, the experience of communities all agree with the mosquito transmission of the disease. For years the quarantine at the mouth of

the Mississippi river consisted in disinfection by sulphur. It was efficient, it was safe, though no one at the time knew what sulphur did and no one suspected that the destruction of the mosquitoes destroyed the germ. Whenever sulphur disinfection was set aside the possibility of yellow fever infection was demonstrated. I believe there would be a unanimity of thought and opinion on this subject if everyone considering it were familiar with all the details of experiments and familiar with the conditions surrounding the experiments. Aside from quarantine officers, who, because of their special responsibility are slow to change their methods, those who will not acknowledge the mosquito as the sole conveyor are those who have not had occasion to study the experiments, or who are not interested in the subject. I am so satisfied that this is the case that I believe a commission of two or three who are not biased on one side or the other, after familiarizing itself with the arguments on both sides, would unanimously agree that the mosquito is the only natural means of conveying yellow fever.

PROF. BEYER, of New Orleans: I have come here to listen not to speak on a subject which has been interesting me for some years. I would like, however, to make a slight correction in Dr. Kohnke's remarks. When the experiments of Drs. Reed, Carroll and Agramonte were first made in Cuba they were theoretical and they had to be corroborated. This has since been done, twice by Americans in Mexico, by foreigners in Cuba, and by foreigners in Brazil, and, in every instance, the proposition laid down by Reed—no longer a theory now but an established fact—has been corroborated in every detail. Aside from that though, there is now another question about which a great deal has been left unexplained, the question: Is the mosquito the only transmitter of the disease? Without reference to the point as to what may or may not be the original cause of yellow fever, this much is sure: a particular mosquito is the only transmitter so far proven. It has also been demonstrated that, whatever is the cause of the disease that cause is not a vegetable parasite. There remains one point to be elucidated and that is: Since insect agency of specific time duration is necessary in the transmission, this transmission being no longer merely a mechanical but a physiological one, the causal agent can therefore be transplanted from one host to the other only when it can find in it the



necessary specific physiological conditions for its further development and reproduction. With a vegetable parasite it is different; with it the mere transplanting by mechanical means is sufficient to insure its growth and reproduction; causation of pathologic conditions in the host is the outcome of its numbers and not the result of a specifically required morphologic change. Of this latter point we certainly have an illustration in the malarial plasmodium. Is there anyone here who would make the assertion that there are other ways of transmission of malaria? I do not think so. Here in yellow fever we have an organism which undoubtedly is of animal nature, and, therefore, it requires its distinctive environment in which only it can live. This environment is a specific mosquito on the one hand and the human being on the other. Therefore, reasoning from the facts that other animal parasites are as specific in the selection of their hosts, it must be the same with this parasite. I must certainly align myself on the side which believes in but one means of transmission and that is the mosquito!

DR. G. FARRAR PATTON, of New Orleans: In replying to Dr. Kohnke, I find myself at some slight disadvantage on account of being also a "maker of idols" in the sense of being connected with the Quarantine Service of the State of Louisiana. So far as this Society is concerned, however, I am here simply as a member, and it is merely an accident that I am also Secretary of the State Board of Health. I do not believe that my friend, Dr. Kohnke, whom I know to be a generous man, realized the full force of the imputation conveyed in his remarks comparing Dr. Thomas to the man of Ephesus who was opposed to the new religion of Christianity because it threatened to break up the business of making idols in which he was engaged. No one who knows Dr. Thomas will for a moment believe that he is actuated by any sordid consideration of personal interest in the stand he takes in this matter. But really, that circumstance should cut no figure one way or the other. The question is purely an official one and has nothing to do with Dr. Thomas' individual motives. The question is whether our present knowledge justifies the belief that yellow fever can be conveyed by no other agency than mosquitoes. The experiments with fomites made by the U. S. Army Commission in Havana and repeated by others have been negative in their results, while on

the other hand there are any number of instances on record in which the disease is claimed to have been transmitted to remote localities under circumstances which can not be explained by the theory of transmission by mosquitoes. I have here a reprint of an article on that subject by Dr. Edmond Souchon, from the *Medical Record*, Feb. 8, 1902, in which the details of twenty-seven such instances are given on authority believed to be unimpeachable. It is not my intention to read any of those instances here, but I place the pamphlet on the Secretary's desk for the information of any one who may desire to read for himself.

I shall mention only one instance, that of the U. S. steamer *Plymouth*, on which yellow fever appeared in the summer of 1878, causing the ship to be put out of commission and sent to Boston, where she remained during the entire winter, much of the time with a temperature below zero. One hundred pounds of sulphur was burned below decks with everything closed tight, the fumigation extending over two days. About the middle of the following March the *Plymouth*, entirely refitted, left Boston for the tropics. About a week later, the ship being then in the latitude of the Bahama Islands, and having touched at no intermediate port, yellow fever again appeared on board, causing the cruise to be abandoned. I mention this circumstance, not as having convinced me, but as affording evidence of the possible transmission of yellow fever by some agency other than mosquitoes which no one has been able to explain, and which is sufficient, taken in connection with countless other instances on record, to justify an officer holding the responsible office of Chief Quarantine Physician at the Mississippi River Station in applying every known method of destroying infection rather than blindly accept the dictum of others that the disease can be conveyed only by mosquitoes. I will go further and say that with the responsibility resting on him as an agent of the people of Louisiana, the masses of whom, including many of the older physicians, refuse to believe in the exclusive conveyance of yellow fever by mosquitoes, he would be criminally culpable in dealing with an infected vessel, if he neglected any part of the process of disinfection which has kept out yellow fever for all these years.

For my part, I am free to confess that I believe the mosquito to

be the most important, and possibly the only means by which yellow fever is conveyed, but I do not admit that this has been proven. As regards methods which have been practiced at the Mississippi River Quarantine Station for the last twenty years, it so happens that sulphur fumigation which has been so thoroughly performed, is the best means for destroying mosquitoes, so that we have done the right thing all the while, blindly if you will, but effectively.

The acceptance of the mosquito theory would, therefore, make but little difference, since it does not do away with detention sufficient to cover the incubation period of yellow fever, and the business of "making idols" would have to go on under Dr. Thomas, or some other officer, just the same.

DR. E. D. MARTIN, of New Orleans: I am told that in 1878 patients were not cleansed, as it was thought they could not be bathed, and they were left wrapped in a blanket and the linen unchanged, and they remained in this condition until they were out of danger or dead. In the epidemic of 1897 the treatment was entirely different. The fever prevailed for quite a while before it was recognized; the experienced persons did not believe it was yellow fever because it did not give off the odor and because it had lost its virulence. At that time the patients were treated as all other fever patients are treated, the linen was changed and they were sponged and only in rare instances was there any odor to be detected. I may be wrong in the statement, but I believe that in Touro Infirmary all cases were admitted and although there was scarcely an immune connected with the Infirmary not a case broke out there. I believe as firmly as Dr. Kohnke believes, that it has been proved that the mosquito does convey the disease, but I have yet to be convinced that it is the only means of conveyance.

DR. KOHNKE, of New Orleans: I fear that what I said has been misinterpreted by Dr. Patton, and I hope that his is not the understanding of the membership. My allusion to the business of quarantine was certainly not intended to reflect on the integrity of any officer. It was intended to illustrate what influence occupation may exert on one's judgment or belief. Medical students are subject to examination by a Board independent of the college of graduation. The college is supposed to be not the proper determining body, not because the college would graduate and qualify in-

competents, but because the decision as to whether the student of medicine is qualified should be rendered by an authority entirely and distinctly separate from and independent of the college. The question under discussion cannot be correctly settled without taking into account every factor tending to interfere with pure judgment. The enthusiast goes too far, sometimes in one direction, while he who is associated with established custom goes too far in another direction, and it was to illustrate the need of eliminating every influence of this kind that I cited the story of a business being interfered with by a new idea. I would withdraw everything that I have said, rather than permit any other interpretation to obtain.

DR. F. J. MAYER, of Scott: You have heard the views of Dr. Thomas as set forth in his paper; they are of great importance because on them hinges, in a measure, the continuance of the system now in vogue at the quarantine station. I do not consider the facetious allusion to Diana of the Ephesians as any reflection on Dr. Thomas because no physician in this State can reflect discredit on Dr. Thomas. His work at quarantine is a monument to his worth, sobriety and executive efficiency. So far as the stegomyia theory is concerned, I have always been a protagonist of it. When the famous Carlos Finley first suggested the possibility of the conveyance of yellow fever by mosquitoes I erroneously believed they could do so directly, just as the tabanidae and mosquitoes convey the bacillus anthracis. But the question is: if a quarantine officer charged with the duty of protecting not only Louisiana but the whole Mississippi Valley from invasion by foreign pestilence, can afford to leave the beaten path of safety, for any theory no matter how plausible. We know that the commercial rivals of New Orleans are waiting and anxious to break down the commercial importance of this city which is rapidly increasing, and which, with the completion of the Isthmian canal, will make New Orleans the entrepot of the Mississippi Valley, Latin American and Oriental trade. These jealous rivals are only too anxious to see in every jaundiced eye an opportunity to tie up the commerce of this port, and I think under these circumstances, it is the part of prudence to continue the present disinfection by sulphurous gas and bichloride of mercury, and the supposed fomites by steam under



pressure, at least until the city is thoroughly sewered and drained, cisterns screened, the swamps and stagnant pools adjacent reclaimed, and the public educated to the necessity of carrying on a relentless war against mosquitoes, which I have no doubt will be done if Dr. Kohnke remains in his present position; but until that time arrives it is incumbent upon the quarantine officers to make haste slowly in changing existing methods. At any rate when a system of quarantine that has afforded protection in the past is attacked the burden of proof rests with its antagonists, to prove beyond the peradventure of a doubt that there are no other avenues of invasion, save through the *stegomyia fasciata*. Until this done it is the part of wisdom to continue the system now in operation.

---

## Society Proceedings.

---

### Orleans Parish Medical Society.

---

*President*, DR. M. J. MAGRUDER.      *Secretary*, DR. S. M. D. CLARK,  
163 University Place, New Orleans.

In charge of the Publication Committee, DR. S. M. D. CLARK, Chairman,  
DRS. E. J. HUHNER and M. M. LOWE.

---

MEETING JULY 23, 1904.

DR. JOSEPH HUME read a paper entitled:

**The Principles Underlying the Therapeutic Treatment of  
General Pyogenic Infections, With Special Reference  
to the Use of Silver Nitrate Solution in Such Cases.**

The successful treatment of infections depends, as does everything else, upon a proper understanding of the physiological and pathological conditions, and though it is far beyond our scope to consider immunity and kindred problems, yet there are certain isolated facts which I wish to call to your remembrance. Though it is generally admitted, I believe that Metchnikoff's theory as to the protective value of the leucocytes is true, little advantage has been

taken of this knowledge from a therapeutic standpoint. Leucocytosis is a constant concomitant of infection, and so far the chief importance of the leucocyte count has been based on its diagnostic value, but I wish to suggest that it has two other distinct advantages, prognostic and therapeutic.

In a forthcoming article Bloodgood (1) concludes from a study of many cases of infection that neither a low nor a very high leucocyte count is a good prognostic, finding, clinically, that a greater number of cases recovered in which the count lay between 25,000 and 35,000. My own experience has been the same.

This may be explained by the hypothesis that with a low count there is no resistance on the patient's part, while a very high one indicates that the infection is so severe that all the patient's resistance is drawn out at once and no reserve force is left.

Flexner has noticed that persons recovering from snake venom poisoning always have a high leucocyte count. Besredka (2) has shown that otherwise fatal peritoneal infections may be averted by the preliminary injection of certain solutions into the peritoneal cavity, and the explanation offered by Metchnikoff and accepted by Welch and others is that such preliminary infections cause an increase in the number of leucocytes and also make them more resistant to the invading bacteria. It is worthy of note that dogs, which are notoriously hard to infect, have a high leucocyte count as compared with human beings. It is known that certain drugs likewise produce a slight leucocytosis, notably turpentine, copaiba, nucleinic acid and perhaps their therapeutic value in certain diseases may be due to this power. It is not so long ago that we were taught that it was the exception to find Eberth's bacillus in the circulating blood in typhoid fever; and as with typhoid, so with other diseases. A brief review of the literature shows a different state of affairs. Schott Muller (3), in 1900, found Eberth's bacillus in 80% of 535 cases; Lessieur in 100% of 36 cases; Richardson in 13 out of 14 cases. In pneumonia, Silvestini found the diplococcus in 15 out of 16 cases and later in 53% of 58 cases. Calvert, working on bubonic plague, found the specific organism in 100% of 36 cases. Von Eisberg, in 156 cases of sepsis, found organisms in

---

1. Kelly's Book on Appendicitis.

2. *Annales de l'Institut Pasteur*, April 25, 1901.

3. Rosenberg—*Am. Jr. Med. Sciences*, August, 1903.

77 cases during life, in 70 after death and not at all in 9. With improvements in the technique of blood culture it is reasonable to suppose that in most cases of sepsis some organism will be found. I think that due consideration of these figures and the pathology of infections almost force us to the conclusion that every case infection must be regarded as one of septicemia.

The problem of infection versus the human organism depends upon these factors: 1. The inherent resisting power of the animal. 2. The virulence; and, 3. The numbers of the infecting organism. These factors can only be modified along two general lines, surgical aid and therapeutic resource. At present surgical treatment is based entirely on three principles, *i. e.*, free drainage, stimulation and increased elimination.

The therapeutic treatment may be properly classified under three heads:

1. To dilute the poisons circulating in the blood of the infected animal and at the same time increase their elimination. This the French term "*lavage du sang*," and the recent publications of Lenhartz and Lanfer contain an elaborate critical review of the methods by which this may be accomplished; the chief means being the use of salt solutions of various strengths, and given subcutaneously, intravenously or by rectum, whereby the toxins are diluted, their solubility perhaps increased and elimination decidedly furthered. The value of salt solution is so well appreciated and known that comment is unnecessary, but its actual effect on the blood deserves some consideration. Brown, of Baltimore, has never noticed any leucocytosis following its use. Caillé (4) has shown that in severe anemias salt solutions improve the blood, irrespective of the administration of drugs. Claissé (5) has demonstrated that massive saline injections reduce the leucocytosis of infections. From many studies, I think we may safely state that salt solution given intravenously in infection is followed by a chill, increase in temperature and slight decrease in the leucocytes, with some degeneration of the red cells, followed later by decrease in temperature, slight rise of leucocytes and restitution of the destroyed blood cells. Of course there are exceptions to this.

---

4. *Arch. of Pediatrics*, March, 1903.

5. C. R. So., Bidl., 1896.

2. To neutralize or antagonize the toxins by specific antitoxins, *i. e.*, the so-called serum therapy. This depends on the fact that certain organisms secrete soluble toxins, which in time produce an antitoxin in the blood of the infected animal. But such a soluble toxin has only been definitely demonstrated in two diseases, to-wit, tetanus and diphtheria. In the latter the mortality has been reduced from between 35 and 50% to about 5% by the early use of the antitoxin; but, so far, the antitoxin of tetanus has not been so successful, and its use has been attended with much uncertainty and disappointment, except as to prophylaxis. Of the anti-pneumococcus and anti-streptococcus serums, the less said the better.

3. To introduce antiseptic solutions into the blood of the infected animal, with the hope that such solutions will destroy the invading organisms at once. The work of Credé and his followers with collargol silver and the recent use of formalin by Barrows has been done with this end in view. Good results were at first claimed for this latter method, but further reports have been discouraging. Park and Payne (6) have shown that formalin solutions in the strengths used have but little bacteriacidal force, and that animals receiving such injections die sooner than those not so injected, both series of animals receiving the same toxic dose. Brodhead (7), reviewing all the reported cases of the formalin treatment, believes that it is useless to continue the use of this method. In an able editorial, *American Medicine* (8), considers intravascular antiseptics, and concludes that it is an absolute impossibility and fraught with much danger to the patient, whether quinin, bichloride, formalin or collargol silver be used. But the value of collargol may be due to means other than its germicidal action. Credé himself uses it as an intravascular antiseptic, and apparently has no other conception of its action. Others, however, have another explanation to offer. Bamburger (9), notably, who explains its action thus: That the finely divided silver which is introduced intravenously must be removed by the leucocytes. The enormous number of leucocytes thus engaged must lose their usefulness and be excreted, to be replaced by new leucocytes, which combat the in-

---

6. *Medical News*, April 4, 1903.

7. *Post-Graduate*, July, 1903.

8. *American Medicine*, May 2, 1903

9. *Berliner Klinische Wochenschrift*. August 24, 1903.



fection. Criticism is unnecessary. It is beyond the scope of the present paper to consider at any length the various aspects of infection in reference to Erlich's lateral chain theory, but rather to suggest a line of treatment based apparently on a new principle, which, clinically, has given results far above the average, and to point out the theoretical considerations which underlie it, with the hope that further study and research will confirm its usefulness and lead to a decrease in the mortality from pyogenic infections.

It is unnecessary to consider the reasons which led to the present method, save to state that they were based on the immense importance of the leucocytes and the empirical selection of silver nitrate solutions to produce a leucocytosis as based on experimental work. Primarily the increase in leucocytes was the desideratum, but very soon a careful study of the cases to which the silver solution was given intravenously showed certain changes which made us feel that increase of the white cells was only one of several other important phenomena. We observed that the leucocytes were first destroyed, often falling from 20,000 to 5,000 in the course of the first hour after the injection, and thought that by their destruction certain anti-bodies—using that term in the general sense—were set free, which to a great extent neutralized the toxins and destroyed the bacteria. The red cells are likewise affected, often falling from 4,000,000 to 800,000 after an injection. But it must be noted that the destruction of the blood cells is only temporary, a rapid regeneration occurring in the next 10 to 12 hours, at which time the white cells are usually found to be more numerous than before the solution was given. In view of these facts, which will be clearly demonstrated by a study of the cases, I think that a new principle for the treatment of infections has been established, namely, the introduction of a solution which by its action on the blood cells tends to produce an artificial immunity, though destruction of cells, consequent liberation of the intermediary body and subsequent increase in the bacteriacidal power of the blood. I believe that formalin, collargol and the many other solutions which have been given intravenously for infection, with the idea of intravascular antiseptis, owe their virtue, not to the antiseptic, but to their hemolytic power. Even salt solution in the strength that it is generally used, as a hemolytic agent, for most hospitals use a .06 or

.07 of 1% solution, whereas the isotonic physiological salt solution is .09%, and much of the value of salt solution in infections may be due to its hemolytic effects. As Dr. Pancoast, of Baltimore, has suggested, sterile water has a hemolytic effect, and when it was given to dogs was followed by destruction and later regeneration of the blood cells.

To turn to the practical aspect of the subject: I use 1 *c. c.* of a fresh 10% solution of silver nitrate to 1,000 *c. c.* of sterile or sterile distilled water, each 100 *c. c.* of the solution containing 10 *mgs.* of silver. Of this solution I use, as a rule, 500 *c. c.* at a time and find this is the best dosage for usual cases, though I have used very much weaker and stronger solutions. The solution should be made just before it is used and should have a slightly blue or opalescent tint. If brown it should not be used. It is not decomposed by ordinary room light, even after an exposure of one to two hours. It should be given at a temperature of 110 or 115° F. and rather slowly, so that 100 *c. c.* is introduced into the vein every two or three minutes. The vein used is generally the medial cephalic or basilic, though any superficial vein of sufficient size answers the purpose. A vein having been selected, the skin above it is cleaned, and under aseptic precautions is infiltrated with Schleich's solution and a small incision made through the skin and subcutaneous tissue. The vein is usually seen without difficulty and is best handled by pushing a closed clamp under it and so elevating it. Its distal end is then ligated and it is cut transversely until its lumen is laid open, into which the intravenous needle—the air having been carefully expelled—is slipped. The solution is slowly introduced, and when the desired amount has been given the proximal end of the vein is ligated and the small skin incision closed with appropriate sutures and a dressing applied. This procedure, if quickly done, causes practically no pain, and the slight soreness in the arm wears off in 24 hours.

The injection is usually followed by a chill, which commences 20 to 45 minutes later and lasts from 15 to 40 minutes. The temperature then rises to 104° or 107° F., stays at its maximum for an hour or so, then gradually but steadily drops to subnormal, taking 8 to 12 hours to do so. Its subsequent plane is peculiar to each case. The chill is probably due to breaking up of the blood cells

or is nervous in origin. We have never observed one where the patient was under an anesthetic or where the condition of the patient was very bad. It does not, however, prostrate the patient very much. The transient rise in temperature already alluded to is followed by a gradual decline, which is accompanied by the most profuse sweating. These sweats often last for hours and have no weakening effect upon the patient. In 12 hours the temperature is usually about normal and the general condition of the patient considerably improved. The temperature now remains down or may rise within 24 to 36 hours to even its former height, in which case another injection is probably indicated.

To avoid too long a report only one case has been selected as illustrative. A detailed statement of all the cases will be published later.

CASE 1. White. Female. 11 years old. Nov. 14, 1902.—Patient was seen in the country suffering from some acute abdominal lesion. Laparotomy by Dr. Bloodgood. A large abscess was found in the middle line, only partially walled off and containing pus and round worms. Appendix involved in the mass. Cavity was swabbed out and drained with iodoform gauze. Patient rapidly grew worse, obstruction and septic symptoms developed and she was brought to the hospital on Nov. 15, with temperature 102 F., pulse 150, respiration 45. At 3 p. m. abdomen was again opened, a distended coil of gut brought out and an enterostomy done. She slowly failed, and at 12 midnight death seemed imminent. With a temperature of 104 F., radial pulse imperceptible, respiration 50 and gasping, leucocytes 25,000, 325 *c. c.* of silver were given intravenously and improvement followed rapidly. At 3 a. m. of the 16th leucocytes were 42,000, and by 4 p. m. temperature was 100, pulse 120, respiration 25. She continued to improve, and though she underwent three more operations, including two lateral anastomoses and radical cure of abdominal hernia. She eventually made a perfect recovery.

To summarize:

I have personally had 11 cases of pyogenic infection, with two deaths, one 33 days after the patient was reported doing well, and this death was due to the intercurrent affection and the other death was from an embolus in the course of malignant endocarditis. In

these cases the silver injection was given 20 times and 7 cases had chills. All the cases, with one exception, were thought to be in extremis by the attending physicians, and the silver was only given as a last resort. I have used it also in carcinoma and sarcomata metastasis, in pemphigus, in typhoid fever and in other cases of obscure origin, in which autopsy was not permitted. Dr. Blake, of the Maryland General Hospital, told me he had given it to 7 desperate cases, with 5 recoveries, but unfortunately I have not been able to see the records of his cases. In all injections the characteristic reaction has followed. In typhoid fever the leucocytes have risen from about 5,000 to 20,000, the reds have decreased about 800,000 and hemoglobin has fallen about 10%. In a case of acute miliary tuberculosis, the white cells before the injection being 4,000, have after the injection disappeared and then risen to 10,000. The solution has been given over 50 times with no untoward results, save a localized phlebitis twice, which I was subsequently able to avoid by handling the vein less. The injection has no influence on wound healing nor on the kidneys. To the contrary, the urine is usually increased in amount, and in one case of acute nephritis of toxic origin the urine, which contained no casts, blood cells and albumin in quantity became practically normal within 48 hours after the silver injection—no blood cells or casts being found, though traces of albumin persisted.

In following the cases it is advisable to make a blood count every half hour for the first two hours after the injections and then every hour. The counts given above are based on an average of ten fields each, and the blood was taken from the finger, ear or vein.

Theoretically we explain the beneficial effects of the silver in this manner: 'Antibodies have been divided into two groups, the *antitoxins*, which are single bodies, and the *cytolysins*, whose antagonistic effects require the co-operation of two bodies.' These two bodies are the "intermediary" body, which is believed to exist in the cells, and is the *direct product* of infection, and the "*complement*," which is normally *present* in the blood.

Behring states: "The same substance when incorporated in the cells of the living body, is the prerequisite and condition for an intoxication, becomes a means of cure when it exists in the circu-



lating bloods." And since it has been fairly well established that the silver solution breaks up the cells, it follows that large amounts of the *intermediary* body are thus liberated, and combining with the already free complement, neutralizes the toxins and hinders or kills bacterial growth. Of course this is only an hypothesis, but it seems to be a better explanation than either the antiseptic or phagocytic theories.

Energetic treatment in severe infections is too often usually left to the last and then the measures of last resort prove of no avail. In my opinion too much stress can not be laid on the point of early energetic treatment in infections. Even in the usual routine of hospitals the intravenous use of salt solutions is put off until the case is in extremis and little, if any, benefit is then seen from its use. As long as the intravenous route is considered a last resort, so long will we lose more cases than we ought to. Assuming that some day we shall have a perfect antitoxin to each pyogenic organism, it is absurd to think that then we shall save all cases in which it is used. For there comes a time when the infected human organism is incapable of responding to anything. In diphtheria and tetanus it is held criminal not to use their respective antitoxins as soon as the diagnosis is made; often before. Why in excessive blood infections, in general peritonitis and in general infections, should not the same active early treatment be pursued? The line of treatment herein advocated is as useless as anything else if the patient has but little resistance left. But if given early, just as soon as the focus is attacked or even before, if operation be delayed for any reason, it undoubtedly increases the resistance of the human organism and has a favorable influence on the progress of the disease.

#### DISCUSSION.

DR. CHAVIGNY said that he had seen a chill follow intravenous saline infusion in two out of 14 cases. He thought it was probably due in his cases to the large amount of solution used, that of  $3\frac{1}{2}$  quarts. Where 2 quarts had been given he had seen no chill.

DR. PARHAM said that any one having a surgical experience would welcome any treatment possessing a curative value in sepsis. He had recently read an article with interest by Mickulicz in the *Lancet* of July 2, in which he reported 45 cases where opera-

tive procedure was necessary upon the uterus and various parts of the alimentary tract. In these cases he had used, as a prophylactic measure to sepsis, dermic injection of 2% nucleic acid, aiming at the production of hyperleucocytosis. Of these 45 abdominal cases operated upon 7 died; in none of which was peritonitis found. Usually 12 days' use of the nucleic acid was the time requisite for the production of the maximum power of resistance to sepsis. From this report he felt that some good would come from its use. Dr. Parham spoke of Welsh's lectures upon immunity. The use of antiseptics, injected into the blood, for their germicidal properties were now looked upon as being based on an erroneous hypothesis, for it was conceded that, in order for an antiseptic solution to have a destroying power upon the bacteria in the blood, it would necessarily have to be of sufficient strength to also destroy the cells of the tissues. He had noticed that Williams in speaking of the treatment of sepsis had mentioned Maguire's use of silver nitrate in the treatment of tuberculosis. Dr. Hume's use of nitrate of silver in surgical sepsis was the first notice that he had seen of the method.

Dr. WEIS said that Dr. Hume's work was a splendid illustration of Erlich's theory of immunity. The nitrate of silver acted primarily to destroy the leucocytes and thereby free the "anti-bodies" (the intermediary bodies of Erlich). The second leucocytosis reaction was only an expression of a *general* activity of the fixed cells of the body, as well as of the leucocytes, with a convergent production of enough amboceptors or intermediary bodies for entire immunity by combination with the complement already present in the blood. By accomplishing immunity in such a manner as described by Dr. Hume, Dr. Weis thought that treatment by antitoxins would be unnecessary.

Dr. EUSTIS mentioned that some might think that silver nitrate after injection into the blood would form chloride of silver, but this would not be the case. The albuminate of silver that is formed will be soluble in the blood serum. He thought that Dr. Hume was to be congratulated upon his work, and that the histories of the cases spoke in behalf of the method better than he was able to do.

DR. CHASSAIGNAC had not seen any reference to nitrate of silver used in the way suggested by Dr. Hume, but he had read in an article from Paris where collargol was used in the same way as the silver nitrate in serious cases of diphtheria with very good results. It probably acted in an analogous manner.

DR. PERKINS spoke of having used collargol as a local application in the treatment of furunculosis, but had failed to note any good results from its use, a crop of furuncles developing at the seat of its application.

DR. HUME, closing, wished to thank the Society for the interest they had shown and Dr. Parham for his interesting remarks on the recent use of nucleinic acid by Mickulicz in establishing a pre-operative leucocytosis. He suggested that nitrate of silver be given before operation, in those cases in which we fear sepsis, for the same purpose, namely, to produce a leucocytosis and to increase the patient's resistance. Various preparations by Gast may be likewise used. It is the hope of the future that along such lines progress will be made and subsequent infection limited.

#### REPORT OF CASES.

DR. PERKINS reported a *case of supposed belladonna poisoning*. He had been called to a child about 3 years old who was very much flushed from head to foot and somewhat restless. Urticarial wheals were scattered over the body and limbs and the pupils were slightly dilated. The child's diet had been simple and routine and no dietetic cause for urticaria could be found. Moreover, the general blush was as intense as that ordinarily caused in scarlatina. The child was a blonde. The mother finally remarked that a few days previous she had removed from the garden a flowering plant which she took to be "deadly nightshade." A saline purge was given to the child, as the doctor thought it likely that he might have discovered and chewed some more of the "nightshade." This was about 11 p. m. The last meal had been about 6 or 7 p. m. The next day, after each meal, the flush returned in part. Saline purgation was repeated and no other treatment was used. Other specimens of what the mother took to be the same plant were afterwards found in the yard and were submitted to the botanical department of one of the large drug manufacturing houses. It was pronounced to be not belladonna, but apparently one of the solanacea.

DR. SEXTON read a paper entitled :

**Report of Successful Removal of Carcinoma, with Some  
General Facts Pertaining Thereto.**

Carcinoma is the most common form of malignant tumors of the breast. Epithelioma and sarcoma are much less frequent. Carcinoma of the breast was found to exist 1,232 times in 7,880 cases of cancer.

The uterus, stomach and breast, in the order named, are the organs most frequently attacked by carcinoma. . An author who has analyzed a large number of these cases states that 40% of all cancers are confined to the breast. Carcinoma of this gland are much more common than were reported half a century ago. Eighty per cent. of all tumors of the breast become malignant in time.

Out of 440 cases of tumors of the breast Billroth only found 18% non-malignant. Only 1 per cent of carcinoma are found in the male breast. Puerperal mastitis has been found to precede 30% of the cases of carcinoma. Trauma is the exciting cause in 13% of all cases. Carcinoma are much more common among white than colored people, and twice as frequent among foreign-born whites than among our native population. It is much less frequent in tropical than in other zones; it is most frequent in damp, low lying unsanitary districts, and it is more common in New England and on the Pacific coast than it is in the Mississippi Valley and southern sections of the United States. Climate and preponderance of the negro race may to some extent explain these facts.

Dr. Gross reports heredity as the cause in 4% of the cases, while Dr. Williams traced heredity in 24% of his cases.

Like most diseases, the immediate cause of cancer has been attributed to microbic origin, and, while a certain protozoon has been suspected, no definite proof has been made as to the specific germ.

The average for the development of cancer has been placed at 48 years, with numerous examples to the later extremes of life. Carcinoma is contemporaneous with the declining breast; locally it is found most frequently in the upper and outer hemisphere of the breast nearest the axilla. Carcinoma spreads by lymphatics from original nodule to the glands of the axilla during the first or sec-



ond month of the invasion; the skin also becomes involved through these lymphatics, and for this reason much skin which looks normal around the nodule should be extirpated in doing a radical operation for the growths.

Secondary deposits may be expected in the viscera after two years. Lungs and liver are the most frequent sites of metastases.

Cancerous cachexia is due to the absorption into the general system of the broken-down structure resulting from the ravages of the disease; removing this source of infection is an indication for an operation, in which we cannot expect to promise other than temporary relief. Nearly all cases improve after operation, becoming more comfortable after this drain and pain is stopped.

The average life of the cancer patient is about two years, though the scirrhus variety has been known to last for a dozen or more years.

Whenever there is a tumor in the breast at any time above the age of 40 we advocate its removal on account of the tendency of benign tumors become malignant, and of the tendency to spread to adjacent glands by constant manipulation, as these cases pass from one surgeon to another, asking for opinions or verification in diagnosis. These tumors are malignant according to the amount of connected tissue contained in them, and are usually much more aggressive in young than older subjects.

Epithelioma usually starts in the skin about the nipple. Carcinoma under the skin of the breast.

It is all-important to call in the microscopist to determine the advisability of an immediate operation in all doubtful cases; the part examined should be taken from the actual growth by an exploratory incision. If malignant remove entire breast; if adenoma or myxoma, remove only the tumor. The operation is much more likely to be successful in removing these malignant growths if done before the skin and lymphatics have been generally involved, and no operation is too extensive, provided infected material remains to be removed.

Many benign tumors in their origin later take on the malignant type; this is especially true when they are subjected to any traumatism, such as a blow or injury. Owing to cracks, traumatism, and Paget's nipple and its extended position, we are more likely to have the tumor begin at this point. The tumor is movable at

first, soon becoming attached, however, to the skin and pectoral fascia; this binding down and fixation of the disease is the origin or cause of the retracted nipple, which is a point in diagnosis; next most frequent site of carcinoma is under and around the nipple—the left breast is more often affected than the right. In only two cases out of 870 were both breasts attacked simultaneously; hence, if both breasts are involved at the same time, it is not likely to prove carcinoma. If the tumor of the breast is of rapid development, it is soft colloid, the slow growths are of the scirrhus variety and are less rapid in eliminating. Carcinoma spreads through the lymph channels—the first lymphatic gland leading off from the tumor arrests the cancer cell in the lymph channel, bringing about secondary enlarged nodules in the lymphatic system. The involvement of the skin in ulceration is brought about by pressure and lymph channel infection, but this is usually secondary to the involvement of deeper lymphatic glands. We have seen carcinoma extending into the chest through the lymphatics, accompanying the arteries; in the same way it may be transferred to the liver or to the opposite breast.

In the early stages of carcinoma diagnosis is very difficult; just at the time we ought to be exact is when we are in most doubt, but as a general rule we make no mistake removing any tumor occurring in the breast of a female between the ages of 40 and 50 years. Retracted nipple and dimpling of the skin over the tumor, with enlarged axillary glands matted together, make a pretty sure clinical picture of carcinoma. After the tumor has ulcerated, nodules have been found in the skin of the chest; enlargement of other glands make a comparatively easy diagnosis without the aid of the microscope.

I have recently operated on such a clinical case, which started from the kick of a child in the upper quadrant of the breast of a woman who had never borne children. An incision was made above the line of the pectoralis major muscle around the upper border of the breast; a second incision was begun at the middle of the anterior axillary fold, extended around the lower margin of the breast; the cut was pear-shaped, with the apex near the axilla. The skin was dissected back so as to expose the margin of the mammary gland; the pectoralis major muscle was exposed and divided at the humeral end and removed with its fascia and tumor

attached. The axillary space was laid open and adipose tissue were entirely removed. There was no supra-clavicular gland enlarged, so this space was not opened. After all the infected area, so far as we could determine, had been removed, we approximated the edges of the wound with catgut suture. We were very fortunate in this case to have sufficient redundant skin tissue to draw around from the sides to enable us to cover over raw surface; true, the tension on the suture was great, but this we relieved to some extent by inch adhesive straps, which we applied around the body. We got union by first intention. We were careful to catch every vessel that bled at once, used as little traumatism as possible in manipulating the parts. We left in a gauze drain for 24 hours in the most dependent portion of the cut. There was some discoloration of the skin of the axilla, but no actual sloughing; an abundant aseptic dressing was applied over the breast, including the arm, which absorbed all the secretion from the wounded lymphatics and vessels.

While complete enucleation of the breast and axillary glands may be classed as a major operation, the mortality of the same has been reduced as low as 2%, while some operators have a clear record of 100 cases with no mortality.

The present method of the complete removal of all enlarged glands and lymphatics reduced the recurrence of carcinoma after the three-year limit to 50%. These results need not be expected or promised in neglected or advanced cases where metastasis to internal organs have perhaps taken place before the case is submitted for operation, but many cases which we cannot cure are temporarily benefited by an operation which cuts away the disease tissue.

Beatson removes the ovaries and gives thyroid extract in recurrent cases, this is done on the theory that removal of the ovaries prolongs lactation, thus preventing the degeneration of mammary glands.

The serum and toxin treatment of cancer has not stood the test of the general clinician, and the X-ray treatment is only applicable to ulcerated non-perable cases. There is no drug treatment for cancer that has stood the test of time.

Pain inflicted by cancer paste and fakirs is much more severe than would be caused by operative procedure, and its sloughing process cannot be controlled nor can it be forced to reach all the in-

flicted parts; it is consequently an incomplete, painful and unsatisfactory procedure.

These rambling facts about the advantages of an early operation in carcinoma have prompted me to offer these suggestions to encourage others to advise patients of the possible benefits to accrue from early operation and the almost hopelessness of cases left too long without the advice of a competent surgeon.

#### DISCUSSION.

DR. HUME stated that he was of the opinion that every tumor of the breast should be considered malignant until proved to be otherwise. The age limit was not reliable, he having seen quite a number of cases below 30 develop characteristic malignant growth. A point of value was that every student should be educated in the field of the normal breast.

DR. MARTIN was glad that Dr. Hume had brought out the importance of early diagnosis. Many of these neoplasms escaped detection until they had reached quite an unusual size or had even become malignant. The best method of examining the breast was to place the palm of the hand over the entire breast, and by gently moving it from side to side the smallest tumor could be detected. He did not agree with Dr. Sexton as to the statistics in regard to the colored race. Whereas many of the Northern surgeons were still under the impression that it was rare in the negro, our own hospital statistics, as well as those of other Southern hospitals, showed conclusively that cancer of the breast was as common, if not more frequent, in the colored race than in the white. After an experience of 100 cases he came to the conclusion that operation, even by Halstead's method, held out little hope if there was any glandular involvement, as the lymphatic system was such that eradication of the infected glands was a matter of impossibility. He therefore urged the importance of early diagnosis and the removal of all neoplasms, no matter how small.

DR. SEXTON, in closing, said that the statistics to which he had access showed that the negro was not especially prone to cancers of the breast, but evidently from Dr. Martin's remarks there is a difference of opinion.



## REPORT OF CASES.

DR. SEXTON reported a case of a white boy who had been brought to his office by his parents *with complete blindness*. There was no history of venereal trouble in the parents and the boy had suddenly become blind after a few days of general malaise. The parents had given him quinin in fairly large doses during the period of malaise, thinking that perhaps he was suffering from malaria. The blindness had come on shortly after the administration of quinin. Dr. Sexton was unable to find any constitutional condition which could explain the blindness and had referred him to a specialist, who had reported that the eye was absolutely normal and he could find no local condition to explain the trouble. Dr. Sexton wished to have the opinion of the members as to what might be the cause of the trouble, and asked if any member had seen a similar effect follow the administration of quinin.

DR. EUSTIS wished to call the doctor's attention to the fact that poisoning by wood alcohol is often followed by blindness, and he would like to know if there was any history of varnish having been used. There are a number of cases reported in the *Army and Navy Journal* of blindness as a result of varnishing the decks of ships. The resin is held in solution by wood alcohol and the sailors breathe the vapors from it with toxic effect. An etiological factor for the blindness in Dr. Sexton's case might be found in this substances.

---

---

## Communication.

---

TO THE EDITORS OF NEW ORLEANS MEDICAL AND SURGICAL JOURNAL:

Dear Sirs:

*The American Medical Society for the Study of Alcohol and other Narcotics* was organized June 8, 1904, by the union of the *American Association for the Study of Inebriety* and the Medical Temperance Association. Both of these societies are composed of physicians interested in the study and treatment of inebriety and the physiological nature and action of alcohol and

narcotics in health and disease. The first society was organized in 1870 and has published five volumes of transactions and twenty-seven yearly volumes of the *Quarterly Journal of Inebriety*, the organ of its association. The second society began in 1891 and has issued three volumes of transactions, and for seven years published a Quarterly bulletin containing the papers read at its meetings. The special object of the union of the two societies is to create greater interest among physicians to study one of the greatest evils of modern times. Its plan of work is to encourage and promote more exact scientific studies of the nature and effects of alcohol in health and disease, particularly of its etiological, physiological and therapeutic relations. Second, to secure more accurate investigations of the diseases associated or following from the use of alcohol and narcotics. Third, to correct the present empirical treatment of these diseases by secret drugs and so-called specifics and to secure legislation prohibiting the sale of nostrums claiming to be absolute cures containing dangerous poisons. Fourth, to encourage special legislation for the care, control and medical treatment of spirit and drug takers. The alcoholic problem and the diseases which center and spring from it are becoming more prominent, and its medical and hygienic importance have assumed such proportions that physicians everywhere are called on for advice and counsel. Public sentiment is turning to medical men for authoritative facts and conclusions to enable them to realize the causes, means of prevention and cure for this evil. This new society comes to meet this want by enlisting medical men as members and stimulating new studies and researches from a broader and more scientific point of view. As a medical and hygienic topic the alcoholic problem has an intense personal interest, not only to every physician, but to the public generally in every town and city in the country. This interest demands concentrated efforts through the medium of a society to clear away the present confusion, educate public sentiment and make medical men the final authority in the consideration of the remedial measures for cure and prevention. For this purpose a most urgent appeal is made to all physicians to assist in making this society the medium and authority for the scientific study of the subject. The secretary will be pleased to give any farther information.

T. D. CROTHERS, M. D.,  
*Secretary.*

# N. O. Medical and Surgical Journal

---

## Editorial Department.

---

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

---

### Quack Advertisements.

Canada is following the lead of the United States Government in its attempt to restrict quack advertising, at least through mailed publications.

At the end of the last session of its Federal Parliament an amendment to the Postoffice Act was proposed as follows: "It shall not be lawful to transmit by mail any books, magazines, periodicals, circulars, newspapers, or other publications which contain advertisements representing marvellous, extravagant or grossly improbable cures, or curative or healing powers, by means of medicines, appliances or devices referred to in such advertisements."

The amendment was adopted, though afterwards withdrawn to allow further consideration. It is expected to pass at the next session.

We have already referred to the provisions of the law in this country which, although not so exclusively directed at quacks, includes immoral or indecent medical advertisements in its prohibition, and is perhaps more satisfactory.

We should now turn our attention to the enforcement of the law, and, as previously suggested in the columns of the JOURNAL call the attention of the Postoffice authorities to some of the violations of the law not difficult of discovery in magazines and daily news papers that come to our homes.

In the meantime, in order to render more effective a campaign by medical publications, the profession should see that their skirts are perfectly clear. Just as with charity, reform should begin at home, and we do not think that an advertisement of (apparently) a secret preparation, a salve guaranteed to relieve all cases of

piles, sent on receipt of the price, should appear in a journal claiming to represent the organized medical profession of this country.

What say you, brethern?

---

### Malarial and Mosquitoes.

Confirmatory evidence of the relation between the anopheles and malaria continues to come in from different parts of the world. Dr. Dempareff, who has recently returned from an expedition devoted to the investigation of malaria lasting two years, reports, in the *Zeitschrift für Hygiene*, that he visited Egypt, Dutch New Guinea, the Western Isles, Dutch Samoa, and Australia. He found that wherever the anopheles were present malaria was apt to be prevalent, and where they were absent, as in Samoa, there was no malaria.

Still more striking is the account by Prince August d'Arenberg of the fight against malaria in Ismaïla, a little city situated on the Suez Canal. As published in the *Annales d'Hygiène Publique*, it seems that this place became infested with malaria, few of its inhabitants escaped it, and in 1902 there had been over two thousand cases of it. A systematic campaign was made against mosquitoes and, as a result, there were only about two hundred cases of malaria during 1903 in Ismaïla. The mosquitoes are now nearly exterminated, and the town is becoming free from malaria.

Yet, right here in New Orleans, where we have not only the evils produced by anopheles, but the dread of possible catastrophe through stegomyia, nothing has been attempted to stop or mitigate the danger. The City Board of Health has done what it could to enlighten the community, and stir it up in the proper effort, but it seems to us that the profession at large could accomplish more, first, by realizing the true significance of facts such as those stated above and, second, by educating the public and the law-makers to the importance of suitable action.

---

### Dr. Bel Reappointed.

The announcement is made that Dr. George S. Bel has been reappointed by Gov. Blanchard as a member of the Board of Administrators of the Charity Hospital. Dr. Bel has shown



interest in the institution and zeal in his duties as administrator. He has also created the impression that he favors giving proper consideration to the medical and surgical visiting staff of the Hospital. For these various reasons the JOURNAL is pleased that he has been reappointed to the position.

---

### Low Mortality Rates in New Orleans.

New Orleans can point with pride to her mortuary report for the month of August. For the whites, the rate of mortality for the month per 1000 per annum is only 14.5, and even with the larger colored mortality, 24.5, the average for both races is brought up only to 17.

More doctors than usual were on vacation during a part or all of August, many of our able operators among the number.

The JOURNAL does not pretend to say whether a dearth of patients led to the absence of the doctors, or the absence of the doctors caused a lowering of the rate, but merely calls attention to the coincidence.

---

### Dr. Shrady Retires From the Record.

Medical journalism in America owes much to Dr. George F. Shrady, the retiring editor of the *New York Medical Record*, which under his direction has stood not only for high standards, but which has successfully presented for forty-eight years a continuous history of current medicine. The profession must ever remember the work of Dr. Shrady, and when the laurels are distributed his should be a large share. More than text-books, more than the teachers of medicine, the clean medical periodical has reached the whole of the profession, and the progress of the world medical has been mirrored in just such publications as Dr. Shrady established and has conducted since its incipency. It will require more than one generation to outgrow the influence of his editorial influence, and though the *Record* will continue its successful work, there are many of us who shall remember the identity of this periodical with the former able, conscientious, upright and esteemed editorial head.

Dr. Thomas L. Stedman has been selected for the editorial management of the *Record*. He has been already some time identified with this department, and we feel that we may congratulate both the *Record* and Dr. Stedman on the promotion at this time.

## Abstracts, Extracts and Miscellany.

---

### Department of General Surgery.

---

In charge of DR. F. W. PARHAM, assisted by DR. F. LARUE, New Orleans.

---

ETIOLOGY AND PROPHYLAXIS OF APPENDICITIS.—Mr. Lucas Championnière, *La Tribune Médicale*, July 9, 1904, in a communication to the Paris Academy of Medicine, says that appendicitis is surely a new disease.

It has been said to resemble typhlitis and the old time *coliques miserere*, which two affections have, however, always been of rare occurrence. Appendicitis occurs, without apparent cause in certain families, in certain districts. It follows the grip, and more frequently is due to intestinal troubles.

It exists with greater frequency among carnivorous people, the abuse of meat rendering one more liable to severe attacks. There is but one remedy for appendicitis, viz.: surgical intervention; but the almost infallible prophylactic treatment lies in a semi-vegetarian diet, with the periodic use of purgatives.

From a personal inquest Mr. Lucas Championnière found that appendicitis was quite rare prior to the appearance of the grip, and on the other hand quite common since the epidemics of influenza. Vegetarian populations throughout the globe are, so to speak, exempt. For example, in Roumania, out of 22,000 sick vegetarians you find *one* case of appendicitis, whilst among the meat consumers the proportion is 1 in 221 patients. In Porto Rico, the first cases of appendicitis originated with the influx of the Americans, who are great meat eaters. In prisons, colleges, convents, where the vegetable regime is the rule, appendicitis is a rarity. Finally, the best way to prevent appendicitis is to avoid constipation and intestinal infection by appropriate means, and especially to beware of too much meat ingestion.

CHYLOUS CYST OF THE MESENTERY.—Mr. Tuffier (in *Revue de Chirurgie*, June 10, 1904), reported to the Société de Chirurgie two cases of chylous cysts of the mesentery.

The first case was a male patient, 48 years old, who, whilst lifting a trunk, was seized with very violent abdominal pains, accompanied by vomiting spells. On admission to hospital, a voluminous, round, and resisting tumor was felt. Laparatomy disclosed a fluctuating tumor floating in the mesentery. There flowed, on tapping, a milky non-coagulable fluid. The cyst was extirpated, and an uneventful recovery ensued. Examination of the sac revealed the fact that the tumor was not of recent origin, but was an old undetected cyst, probably congenital.

The other case was that of a child, aet. 12 years, who for several years presented typical attacks of chronic intestinal obstruction. On examining the abdomen, during a crisis, a sub-umbilical tumor was discovered, dipping down into and almost filling the pelvis. Mr. Tuffier opened the abdominal cavity and found in the mesentery a chylous cyst with three large pockets and a considerable number of small cysts, all of chylous nature. Decortication being impossible, simple drainage was resorted to, the little patient making a happy and complete recovery.

---

## Department of General Medicine.

---

In charge of DR. E. M. DUPAQUIER, New Orleans.

---

**PLEURISY IN THE COURSE OF TYPHOID FEVER.**—Pleurisy with effusion of either serum or blood, but oftener of pus, is a complication of typhoid fever, though not a common one. It rarely occurs as the very first manifestation of typhoid infection, just as seldom does it accompany the stage of development of the infection. It usually appears during the stages of decline and of convalescence.

We generally admit that in mostly all cases the cause is the bacillus typhosus. Yet, this is far from true, since it is at times the manifestation of a latent tubercular infection, favored and revealed by an intercurrent typhoid infection.

Mosny and Beaufumé report a case, admitted into their wards in the Hospital St. Antoine, presenting the history and clinical picture of a typhoid infection of average severity at its fastigium, confirmed by the sero-diagnostic test (agglutination occurring in a

culture dilution 1 to 40 in one hour) in which, on the 25th day, clinical signs of pleurisy with effusion made their appearance without causing much disturbance. Both sides were involved. On the left, pleurisy was interlobar, on the right basilar. The needle fetched some clear serous fluid.

After nine days from the onset, all signs of effusion had disappeared and the patient subsequently made a complete recovery of both her pleurisy and her typhoid fever.

The interest centered about the serum from the pleura. It contained no bacillus typhosus and it never agglutinated any of the culture dilutions tested. But it did kill in five weeks guinea pigs inoculated with it and they presented, post mortem, confluent and generalized lesions of acute tuberculosis.

This point of inoculation with the pleural fluid is of paramount importance. It furnished unmistakable proof of the tubercular origin and nature of this case of pleurisy and it was the only way of finding them out.

While there is an abundance of facts showing that pleurisy can be caused by the bacillus typhosus, it is not always the case as shown here, and as it might have been shown in many other cases had inoculation been performed.

The matter here considered is not simply of scientific interest, it implies a vital question, the protection and security of the future of the patient.—*La Tribune Médicale*, July 9, 1904.

MERCURY IN SYPHILIS.—Mercury does not act at all times as a certain preventative. Those unfortunates, inexperienced or careless fellows who neglected to take mercury in sufficient quantity at the time of their infection with syphilis, because it was such a mild case that no one could perceive it, have little hope to escape in after years the embellishment of a sunken nose-bridge or of an incoordinated gait. Why? Simply because when threatened they will start taking mercury, but it is too late. They will then take it, in high doses, by mouth, inunctions and needle, to no avail or hardly so. There is only one time for taking mercury in syphilis, and that is at the beginning. It must be taken then in sufficient quantity, for at least three years, and then events might be allowed to take their course, and if threatening indications appear, the administration of mercury,



even at a late date, will prove effective, and the danger will be curbed in a great measure.—*Médecine Moderne*, August, 1904.

---

## Department of Nervous and Mental Diseases.

---

In charge of DR. P. E. ARCHINARD and DR. ROY M. VAN WART,  
New Orleans.

---

PARALYTIC CHOREA.—Camp exhibited before the Philadelphia Neurological Society (*Journal of Nervous and Mental Diseases*, August, 1904) an interesting case of this affection. The patient, a schoolboy 14 years of age, had had the ordinary diseases of childhood, but no rheumatism. He had been well until two weeks previous to his admission, when his father noticed a gradually developing weakness in the right arm. About the same time slight irregular movements were noticed; these were most marked in the right arm, but were present in the other extremities. The boy never complained of any pain or numbness in the arm. Examination showed slight choreiform movements in all the extremities. The right upper limb was very weak. He was unable to raise it above his head, and when so raised by the examiner it dropped immediately the support was removed. The grip of the right hand was very feeble; the left was normal. Both knee jerks were slightly diminished. Sensation was unaffected except that there was a slight diminution of touch perception in the right hand.

APHASIA AND THE CEREBRAL ZONE OF SPEECH.—Mills (*Am. Jour. Med. Scien.*, September, 1904) gives diagrams showing his conception of the speech areas and cites cases supporting his views. The first case cited is one corroborating the existence of a center or area of representation of speech in the caudal portion of the third frontal gyrus and in the insular. This patient, after an apoplectic seizure, developed aphasia, apparently without preceding paralysis or any other symptoms of focal lesion like visual blindness or hemianopsia. When examined, nine years after the onset of the aphasia, he had almost complete inability to name persons and objects which he was able to recognize. He had also a marked

form of paralexia. When he attempted to read, although he understood what he was reading, he repeated an absurd formula of phrases. He had limited spontaneous speech. He could write many single words correctly, sometimes misspelling, however. The lesion was an old hemorrhagic cyst, limited to the posterior part of the third frontal gyrus and the insula. As the second frontal convolution was not involved and the patient could still write, it was held to be evidence in favor of a separate writing center. Another case of tumor which was operated on and successfully removed, was also mentioned in this connection.

A third case, one of softening, which involved the lower extremities of the central convolutions both on the lateral and sylvian surfaces, with a small area in the middle of the insula, and gave rise to paralysis limited to the tongue, lips and lower part of the face. No aphasia showed that the motor speech center was situated in the inferior frontal convolution and anterior part of the insula. Other cases showing the lesion, mixed motor and sensory aphasias are cited. The importance of these studies is in their application to the correct localization of gross brain lesions apart from their purely scientific interest.

PSYCHOSIS DURING PREGNANCY, RENDERING ABORTION NECESSARY.—*Trueb* (*Centralblatt für Gynäkologie*, 1904, No. 23) reports the case of a woman who, in her fourth pregnancy, became frightened that her child would be a monster after reading a novel which described such an occurrence. She tried to throw herself from a railway train and later to kill the monster by passing a pin through her abdomen. All efforts to overcome the delusion failed. The uterus was then emptied and the patient completely recovered.

## Louisiana State Medical Society Notes.

---

In charge of DR. ISAAC IVAN LEMANN, Secretary, 163 University Place.

---

OFFICERS—President, Dr. Charles Chassaignac, New Orleans; 1st Vice President, Dr. Oscar Dowling, Shreveport; 2nd Vice President, Dr. L. C. Tarleton, Marksville; 3rd Vice President, Dr. J. P. Buquoi, Colomb; Secretary, Dr. Isaac I. Lemann, New Orleans; Treasurer, Dr. M. H. McGuire, New Orleans.

COUNCILLORS—Drs. A. G. Friedrichs, Chairman, 2nd Cong. Dist., 641 St. Charles St., New Orleans; J. J. Ayo, Sec'y., 3rd Cong. Dist., Bowie; P. E. Archinard, 1st Cong. Dist., New Orleans; S. L. Williams, 5th Cong. Dist., Oak Ridge; N. K. Vance, 4th Cong. Dist., Shreveport; C. M. Sitman, 6th Cong. Dist., Greensburg; C. A. Gardiner, 7th Cong. Dist., Sunset.

---

President Chassaignac has been summering in Canada.

Dr. Oscar Dowling, First Vice-President of the Society, left during the month for a visit to New York, and other cities.

Treasurer M. H. McGuire spent a very pleasant two weeks at the St. Louis Exposition.

Dr. Isaac Ivan Leman has resigned as Secretary and will leave shortly for a year of study abroad.

Signatures are desired to the petitions now being circulated throughout the parishes, asking Congress to incorporate the American Medical Association.

At the meeting of the Claiborne Parish Medical Society held July 12th., the following new members were elected: Drs. J. F. Simpson, Athens; J. C. Chapman, Antioch; P. Gibson, Homer; W. P. Cacksey, Homer. This brings the membership of this Society to 14, and its energetic Secretary, Dr. J. E. Knighton, expresses the hope that in the near future every eligible physician in his parish will be enrolled.

Union Parish Medical Society was organized at Farmerville last month, has applied for a Charter.

Following are the officers and members: President, Dr. C. H. Jameson, Farmerville; Vice-President, Dr. Wm. Sellers, Junction City, Ark.; Secretary-Treasurer, Dr. R. L. Love, Farmerville; Councillors: Drs. O. K. Thompson, Marion; P. A. Tatum, Cherry Ridge; G. P. Smith, Shiloh; W. R. Griffin, D'Arbonne. Other members are: Drs. D. B. Garland, Bernice; J. G. Evans, Farmerville.

Tensas Parish Medical Society, which was organized on May

18, 1904, has applied for a Charter. The officers and members are: President, Dr. P. L. Bellenger, Waterproof; Vice-President, Dr. S. A. Murdoch, St. Joseph; Treasurer, Dr. McD. Watkins, Keithville; Secretary, Dr. E. Dunbar Newell, St. Joseph. Other members are: Drs. J. Edwin Slicer, Waterproof; M. Andrews, Waterproof; E. T. Newell, St. Joseph; C. C. Horton, Ashwood; S. P. Herring, Keithville; D. H. Alverson, Deltabridge; J. W. Montgomery, St. Joseph. All the above are charter members, and the list includes every eligible physician in Tensas Parish.

Dr. P. L. Thibaut has been appointed by President Chassaignac to the office of Secretary, vice Dr. Isaac Ivan Leman, resigned.

---

### MINUTES OF LOUISIANA STATE MEDICAL SOCIETY. (Concluded.)

DR. A. F. BARROW, President of the State Board of Medical Examiners, reported as follows:

*To the Officers and Members of the Louisiana State Medical Society:*

Your Board of Medical Examiners presents its report of its operations during the past twelve months, together with its recommendations in regard to the future.

The total number of complaints accompanied by names of witnesses and necessary details that have been reported to the Board during the past twelve months was (15) fifteen. Of course, the Board could institute no proceedings in cases of complaint in which the informant imposed secrecy as to his name and was unwilling or unable to furnish evidence. In the fifteen cases above mentioned the Board has succeeded in having the violators enjoined from further practicing. In the event of the violation of the injunction said violator can be imprisoned for contempt of court by summary proceedings. In the other class of cases the Board has been able only to demand a suspension of the *alleged offense*. In some instances the demand has been complied with.

One of the difficulties in the way of the Board instituting more numerous proceedings (even where it has the detailed evidence to justify same) arises from the fact that the expenses of all such proceedings, including costs of court and attorney's fees, have to be paid out of the funds of the Board, which, as you know, are exceedingly limited. With an expense ranging between \$35.00 to \$60.00 per case, the Board cannot meet the cost of many cases yearly. This difficulty brings us to the subject of the amendments to the Medical Act that are necessary to make it more effective.



In some cases the best way to check violators of the law will undoubtedly be a criminal prosecution with a penalty of fine and imprisonment. Cases may arise, however, where from local conditions this remedy may be ineffective, and in these instances the present method by injunction will be more effective. The Board, therefore, recommends that the act be amended so as to make it possible for the Board to apply either the criminal or civil redress.

The definition of the practice of medicine is so defective as to hamper the Board in its checking of improper practices. It should be made to include the professing and public advertising that the person prescribes, directs or applies for the alleged purpose of curing, etc., as well as the actual prescribing. It is very difficult for the Board to obtain the direct evidence of treatment by a special individual in the quack institutes that abound in this community so as to proceed against such individual in person. The basis of the harm is the public claim of the power to cure diseases, and no one should be allowed to make this public claim unless he is a qualified physician. The definition should also include the various agents or members of the corporation associations, etc., that publicly claim that they cure diseases.

The Board suggests that gynecology should be included among the subjects upon which candidates should be examined. A penalty should be prescribed for the practice of midwifery without a certificate.

Any one member of the Board should be permitted to hold the examination for midwifery, and give the proper certificate therefor. The Board should be allowed at its discretion to waive examination in favor of any applicant who shall present a satisfactory certificate of examination from boards of medical examiners of other States, and to adopt rules governing the action of the Board in such cases; the said Board to be the sole judge as to which boards of examiners such certificates shall be satisfactory. The Board considers this amendment of vast importance, as it will tend to establish a system of reciprocity between this State and States whose boards of medical examiners have a standard of requirements satisfactory to the Board of this State. The absence of such reciprocity seriously affects practitioners of this State, who may find it to their advantage to move to other States.

The words "convicted of immoral conduct" in Section 15 are meaningless from a legal standpoint. The courts cannot "convict" a party of "immoral conduct." It can only "convict" of some crime, though the crime may involve "immoral conduct." This should be changed so as to be made more effective.

The Board thinks that it would be advisable, if the proceedings by criminal action be added, that the parish in which the party is being prosecuted should derive some benefit from the fine, and it suggests that the fine of one hundred dollars (\$100) be divided

equally between the Board of Medical Examiners and the Parish School fund.

There are certain verbal changes that will serve to strengthen or make clear the act, but which it would be burdensome for the Society to hear in detail. The foregoing are practically all the important amendments for which the Board would ask the approval of the Society.

Since the Board has been in existence it has failed but in one case to check any violation of the law of whose acts of violation it had received the details and the names of the witnesses. In that one case certain local conditions, which the Board prefers not to specify, interfered with its success in the courts, but as the Board has received no information of the continued violation of the law by the party referred to, it believes that the attempt has been as efficacious as an actual victory would have been.

With the amendments suggested enacted by the Legislature, and with the earnest co-operation of the local parish societies in ferretting out the names of the offenders and procuring the necessary evidence and the interesting of local district attorneys in the enforcement of the law, the Board believes that it can very positively exclude from the State that element so disastrous to its health, "the quack practitioner of medicine."

DR. F. A. LARUE, Chairman of the Special Committee on Medical Practice Act, reported as follows:

MR. PRESIDENT AND GENTLEMEN: As Chairman of the above committee, I wish to report as follows: Your President, Dr. Barrier, appointed this committee: First Congressional District, Dr. F. A. Larue, New Orleans, Chairman; Second Congressional District, Dr. J. B. Guthrie, New Orleans, Secretary; Third Congressional District, Dr. F. R. Tolson, Lafayette; Fourth Congressional District, Dr. F. R. Tarkington, Shreveport; Fifth Congressional District, Dr. C. W. Hilton, Monroe; Sixth Congressional District, Dr. Charles McVea, Baton Rouge; Seventh Congressional District, Dr. C. J. Ducote, Cottonport.

Dr. Tarkington not accepting, Dr. W. K. Sutherlin, of Shreveport, was appointed in his stead, who, not accepting, was replaced by Dr. G. C. Chandler, of Shreveport.

This Committee was appointed August 15, 1903. The Chairman called a meeting of this Committee on September 19, 1903. Drs. McVea, Guthrie and Larue were present. Mr. E. T. Florance, the attorney of State Medical Examining Board, was also present, at my suggestion, with the sanction of your President, Dr. Barrier.

Although we had no quorum present, we deemed it wise to take up the subject in question.

A few days later a memorandum of the suggestions, decided upon at the conference of the Committee, was sent to the Secretary, Dr. Guthrie, by Mr. Florance. The alterations suggested to the present Medical Act are as follows:

1st. To so amend Section 13 as to make it include within the definition of the practice of medicine the professing and public advertising that the person prescribes, directs or applies for the alleged purpose of curing, etc., as well as the actual prescribing, etc.; to include also the treatment of mental diseases and the use of any force, whether physical or psychic, or whether to be applied by the patient, or by any other person; to include also the gratuitous prescribing; and to include the various agents or employes or members of any corporation, association or partnership, which cures or publicly advertises that it cures such diseases, etc., in any of the modes mentioned in this section.

2d. To include gynecology among subjects upon which candidates should be examined.

3d. To prescribe a penalty for the practice of midwifery without a certificate.

4th. To allow any one member of the Board to hold examinations for midwifery, and give the proper certificate therefor.

5th. To make it optional with the Board to proceed against violators of the Act, either by injunction, as at present, or by criminal process in the name of the State, and in either case to permit the Board to require the services of the District Attorneys throughout the State, or to employ special counsel at its discretion. The penalty imposed to be equally divided between Public School Fund and the State Board of Medical Examiners.

6th. To permit the Board, at its discretion, to waive examination in favor of any applicant or applicants who shall present satisfactory certificate of examination from boards of medical examiners of other States, and to adopt rules governing the action of the Board in such cases; the said Board to be the sole judge as to which boards of examiners such certificates shall be satisfactory.

The above amendments were again read at a meeting of the Special Committee held this morning, and unanimously adopted, at which meeting were present Drs. Tolson, Ducoté, Guthrie and Larue, forming a quorum.

The following amendment to Section 9 was unanimously adopted:

Be it further enacted, etc. That to facilitate the recordation of certificates issued in accordance with this act in the office of the Clerk of the District Court of the parish in which she or he shall locate and the registering of the successful applicant in the office of the State Board of Health, that the successful applicant pay



over to the State Board of Medical Examiners the fee of \$1.00 due the clerk of the District Court.

The Secretary of the State Board of Medical Examiners shall then turn over this fee to the clerk of the District Court in the parish where the candidate has just located, and shall also deliver unto the State Board of Health immediately after the examination for legal registration the certificates of the successful candidates. Such certificates transmitted or delivered to the State Board of Health shall entitle the above named applicants to be placed on the list of registered physicians and surgeons, the publication of which is hereinafter provided for. Said Board of Health shall preserve such certificates, and a copy thereof, signed by the Secretary, shall be received as evidence in the courts of the State, and for such copy a fee of 50c. shall be paid.

The opinion of the Committee on the subject of osteopathy is to completely ignore that alleged branch of medicine, and to that end not to insert the word "manipulation."

The idea of the Committee is that a fight against the osteopaths would advertise them, and that at present they do not cause sufficient annoyance in the State to justify inviting obstruction to the more important amendments that are needed to the Medical Act.

Discussed by Drs. Chaillé, Gessner, Larue, LeBeuf, Barrow and Ellis.

Dr. Gessner moved to adopt reports of both the Boards and the Committee, and to urge the Committee on Public Policy and Legislation to push the matter before the Legislature. Seconded and carried.

Dr. Hays introduced the following resolution:

*Whereas*, Statistics have recorded the lamentable and alarming fact that insanity is increasing in greater proportionate ratio than is the population; and,

*Whereas*, In all civilized countries provision is being made to care for the unfortunates after they have become insane, there has as yet been no systemantic, organized effort to prevent the constant increase in their number.

*Resolved*, That the President appoint a Special Committee of three members, whose duty it shall be to report at the next annual meeting of the Louisiana State Medical Society upon the best method of preventing the increase of insanity.

On motion adopted.

A recess of fifteen minutes was taken so that the Society could be photographed in a body.



After recess Dr. Dowling moved that an honorarium of \$25 be voted to Mr. George Augustin, the Assistant Secretary. Seconded and carried.

Dr. Hamilton Tebault, Jr., read a paper entitled "Fresh Air, physical Discipline and Exercise in the Treatment of Pulmonary Tuberculosis."

Dr. Dowling offered the following resolution:

*Whereas*, It has been found necessary that all pilots of river and inland crafts should be required by the National Government to pass a successful examination for color blindness, in order that they may recognize the signal lights, and thereby avoid disaster; and

*Whereas*, It is equally necessary that all employes charged with the running and control of railroad trains and street cars should be equally well equipped.

*Resolved*, That it is the sense of this body that the Legislature should enact a law compelling public carriers to require of their employes certificates from competent physicians that they are in full possession of the special senses of sight and hearing, without which the lives of the traveling public may be placed in jeopardy, and providing that it be done at a nominal cost to the employes, and that a copy of this resolution be referred to the Speaker of the House.

On motion resolution was adopted.

Dr. Gessner offered the following resolution, which, on motion, was adopted:

*Whereas*, The Medical Department of the United States Army at present suffers from three serious defects of organization, which handicap its efficiency in time of peace, and render impossible any efficient expansion in time of war; these defects consisting in:

(1) A commissioned personnel entirely inadequate to perform the medical service of the Army, even in time of peace.

(2) Insufficient inducement in way of pay and promotion to attract the most desirable class of young physicians to enter the corps.

(3) No satisfactory means of expansion to meet war conditions and special needs in time of peace (epidemics, "little wars," etc.); and those defects are fully and satisfactorily remedied without much additional cost to the Nation by the provisions of the Senate Bill No. 4838, drawn up by the Surgeon-General of the Army, with the approval and endorsement of the general staff of the U. S. Army, the present Secretary of War, the Hon. William H. Taft, and his predecessor, the Hon. Elihu Root, and has received the full

endorsement of the American Medical Association at its last meeting in New Orleans in 1903.

*Be it Resolved*, That the Louisiana State Medical Society concurs with the A. M. A. in its advocacy of the Bill, and urges its passage by Congress as a measure of the greatest importance in increasing the efficiency of the Medical Department of the U. S. Army, and generally improving the conditions now existing in this important branch of the public service.

*Resolved*, That a copy of this resolution be transmitted to our representatives in Congress, and especially to the Hon. R. F. Broussard, of New Iberia, a member of the House Committee on Military Affairs, with the earnest hope that said Bill No. 4838, entitled "A Bill to increase the efficiency of the Medical Department of the Army," in its amended form, may secure his favorable consideration and support.

Paper by DRs. WILLIAM M. PERKINS and L. L. CAZENAVETTE, entitled "A Case of Persistent Surgery," was read by title.

Paper by DR. P. A. BOYKIN, of Jeannerette, entitled "An Unusual Case of Retained Fetus, with Specimen," was read by Dr. LeBeuf, and specimen was exhibited.

DR. JOACHIM read a paper entitled "Antitoxin Treatment of Hay Fever; Personal Observations Made in Dr. Dunbar's Laboratory."

DR. GORDON KING read a paper entitled "Some Manifestations of Grippe in the Ear and Upper Air Passages."

DR. PERKINS moved to install officers for 1904-05. Seconded and carried.

The President appointed Drs. Joachim and C. J. Ducoté a committee to escort the new officers to the platform.

DR. CHASSAIGNAC was introduced and installed as president.

The other new officers were declared installed.

DR. PERKINS moved that a vote of thanks be tendered to the Chess, Checkers and Whist Club for entertainment, the New Orleans Polyclinic for lunch served, the Tulane Medical College for use of building, the medical press of the State, the lay press, and to the Orleans Parish Medical Society for the use of their room. Seconded and carried.

DR. CHARLES CHASSAIGNAC, of New Orleans, read a paper, entitled "Spinal Analgesia in Genito-Urinary and Rectal Operations."

DR. PERKINS moved that all unfinished business and minutes be referred to the Executive Committee. Seconded and carried.

DR. HAYS offered the following resolution:

*Resolved*, That it is the sense of the Louisiana State Medical Society that the criminal insane and the convict insane should not be sent to the State Insane Asylum, where the ordinary and innocent insane are sent for treatment, as thereby the latter class are of necessity forced into close communication with the convict and criminal class, greatly to their detriment.

*Resolved*, That the Legislature be requested to draft a law providing for the furnishing of suitable wards in the State Penitentiary for the treatment of the criminal and convict insane, and thereby relieve the other unfortunate inmates of the Asylum from contact and contamination from that source. Seconded and carried.

DR. GUTHRIE asked that his paper entitled "Carbuncle Treated by Excision and Grafting" be read by title.

DR. GALLOWAY read a paper entitled "Pernicious Malarial Fever."

Adjourned.

---

## Medical News Items.

---

THE FOURTH PAN-AMERICAN MEDICAL CONGRESS, which was to have met the latter part of December of this year at Panama, has been postponed until January. This was done at the request of many who proposed to attend, and desired to be at home for Christmas.

The delegates from this side of the continent will leave on Tuesday, December 27, if they go down from New York by the regular Pacific Mail Lines, or at other dates if they go by way of New Orleans or Jamaica. The dates of sailing from the Pacific Coast have not yet been ascertained. The Congress will be held from January 4 to 7.

President Amador of the Republic of Panama has appointed the following officers: Dr. Julio Ycaza, Pres.; Dr. Manuel Corrales, Vice-Pres.; Dr. Jose E. Calvo, Sec'y.; Dr. Pedro de Obarrio, Treas.; Drs. J. W. Ross, J. Tomaselli and M. Gasteazoro, Committee-men.

There will be but four sections: Surgery, Medicine, Hygiene

and the Specialties: *Surgical Section*: Major Louis LeGarde, Pres.; Dr. E. B. Barrick, Sec'y. *Medical Section*: Dr. Moritz Stern, Pres.; Dr. Daniel R. Oduber, Sec'y. *Section on Hygiene*: Col. W. C. Gorgas, Pres.; Henry E. Carter, Sec'y. *Section on Specialties*: Dr. W. Spratling, Pres.; Dr. Charles A. Cooke, Sec'y.

THE AMERICAN CONFEDERATION OF RECIPROCATING EXAMINING AND LICENSING MEDICAL BOARDS will meet at the Hamilton Hotel, St. Louis, October 25.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION will meet in Cincinnati October 11, 12 and 13, 1904. A most interesting program is announced.

THE TEXAS SANITARIUM FOR TUBERCULOSIS devoted exclusively to the care and treatment of tuberculosis was opened for the reception of patients in August, 1904. This Institution is situated at Llano, Texas, one hundred miles from Austin. Dr. J. F. Bernard is resident physician. The Board of Directors extend a cordial invitation to members of the profession to visit this place.

GOV. TERRALL, OF GEORGIA, HAS APPOINTED a number of leading physicians from different parts of the State to investigate the extent of tuberculosis, and to devise means of stamping it out.

ACCORDING TO THE JOURNAL OF THE A. M. A., the total number of deaths from lock-jaw from the last Fourth of July celebrations was 91, as against 406 the previous year, but there were 92 deaths from other causes, against only 60 last year. The total deaths were 183, and the total number of persons injured was 3,986.

THERE WERE 26,138 MEDICAL STUDENTS IN THE U. S. A. last year, a decrease of 1,477 from the previous year. There are 166 medical colleges; of these 133 are regular, 19 homeopathic, 10 eclectic, 3 physiomedical, and 1 institution which teaches all the "pathies" and "isms," including oseopathy.

THE SIXTEENTH ANNUAL SESSION OF THE TRI-STATE MEDICAL SOCIETY OF ALABAMA, GEORGIA AND TENNESSEE will be held at Chattanooga, Tenn., October 12, 13 and 14, 1904, under the Presidency of Dr. F. B. Sloan, of Cowan, Tenn. The headquarters will be at the Read House.



THE BETHANY HOME SANITARIUM, Claiborne Avenue and Allen Street, was dedicated August 22. Dr. W. T. Richards will be House Surgeon, and there will be a School for Nurses with a two years' course.

THE ALEXANDRIA BOARD OF HEALTH publishes its Sanitary Officers' Report each month. The last shows good work, and that the people are being educated to appreciate its benefits.

THE GARFIELD (OKLAHOMA) MEDICAL ASSOCIATION has been organized with 24 charter members. The next meeting will be held October 14.

GOVERNOR BLANCHARD HAS APPOINTED THE FOLLOWING as delegates from Louisiana to the American International Congress on Tuberculosis, to be held at the Louisiana Purchase Exposition, October 3, 4 and 5: Drs. Charles Chassaignac, Jno. B. Elliott, Quitman Kohnke, E. Souchon, J. D. Bloom and Frederick Loeber, of New Orleans; Milton Smith, of Shreveport; George A. B. Mays, of Jackson; N. K. Vance, of Shreveport; J. M. Barrier, of Delhi; A. F. Barrow, of St. Francisville; Charles McVea, of Baton Rouge; Sam Scruggs, of Cloutierville; C. H. Irion, of Benton; S. A. Poole, of Simsboro; A. A. Forsythe, of Monroe; Clarence Pierson and R. O. Simmons, of Alexandria; C. J. Ducoté, of Cottonport, and Z. T. Gallion, of Natchitoches.

PERSONAL.—DR. C. M. BRADY was elected President of the Jefferson Board of Health last month.

DR. SAM SCRUGGS, of Cloutierville, has been appointed member of the Board of Trustees of the Louisiana Institute for the Deaf and Dumb.

DR. W. S. BLOCK, of Baltimore, has arrived and will be the first Surgeon in charge of the N. O. Naval Station.

DR. GEORGE S. BEL and Mr. LEWIS E. VALLOFT have been appointed by the Governor to succeed themselves as members of the Board of Administration of the Charity Hospital.

DR. M. R. PURNELL has removed from Ashwood, La., to Shreveport.

DR. W. H. DALRYMPLE, of Baton Rouge, has returned from a visit to his old home in Scotland.

DR. ISADORE DYER has returned from his trip to Europe.

DIED.—DR. B. D. WATKINS died at Natchez, August '12, aged 42 years. The doctor was a graduate of Tulane, an intern at the Charity Hospital and had charge of the hospital at Natchez for a number of years. He was a brother of the late Dr. Watkins of this city.

THE NEW YORK SCHOOL OF CLINICAL MEDICINE announces the following changes in faculty: General Medicine—Profs. Wm. Brewster Clark and Henry Lawrence Schively; associates, Profs. Thos. M. Acken and Edw. L. Kellogg. General Surgery—Prof. Simon J. Walsh and associate, Prof. J. Cameron Anderson. Necrology—Profs. Augustin H. Goelet and A. Ernest Gallant. Pediatrics—Profs. Dillon Brown and Henry Comstock Hazen. Nervous and Mental Diseases—Profs. J. Arthur Booth and Emmet C. Dent. Gastro-Intestinal Diseases—Prof. Robert Coleman Kemp. Ophthalmology and Otology—Profs. John L. Adams and Geo. Ash. Taylor. Dermatology—Prof. Robert J. Devlin. Larynology and Rhinology—Prof. Max J. Schwerd. Orthopedic Surgery—Prof. Homer Gibney. Hydrotherapeutics—Prof. Alfred W. Gardiner. Genito-Urinary Diseases—Profs. Wm. K. Otis, Walter Brooks Brouner and John von Glahn. Pathology—Prof. E. E. Smith.

OBITUARY.—DR. H. C. COTY.—Shreveport, La., Aug. 13, 1904.—At a call meeting of the Shreveport Medical Society, with Drs. Chandler, Abramson, Hawkins, Vance, W. L. Egan, Frater, J. C. Egan, Reisor, O'Leary, Furman, Calloway and Boaz present, the following resolutions on the death of Dr. H. C. Coty were adopted:

T. D. BOAZ,

*Secretary.*

Shreveport, La., Aug. 13, 1904.

Your committee on necrology begs leave to report as follows:

In the death of Dr. H. C. Coty, which occurred in the Hoffman House in New York City on the 10th inst., the city of Shreveport has lost one of its most useful and most highly esteemed physicians.

Dr. Coty was born in this city on the 17th of July, 1859, and was reared in DeSoto parish near Keachi, where he studied the profession of medicine under the direction of Dr. J. R. Horn of that place. He was a member of the first class of medical students who

acted as internes at the Shreveport Charity Hospital when established at Moss Side about the year 1875.

He graduated from the University of Louisville in 1880 and commenced the practice of medicine in Shreveport soon after, where he had built up perhaps the largest clientele of any physician in the city.

He exhibited great skill and knowledge and powers of discrimination in his chosen profession, and by his quiet and unassuming manners and devotion to his duties as a physician had won the confidence of the larger portion of the people of Shreveport.

He leaves a wife and one daughter, a father and mother and a sister and family and two brothers, besides many other connections who will mourn greatly this dispensation of Providence.

The Doctor had for many years filled the position of coroner, which he held at the time of his death, having been recently re-elected for a new term.

He had long been local physician of the Texas & Pacific and Houston East & West Texas railroads at this point.

Since 1880 he had been an honored member of the Shreveport Medical Society and had filled the offices of president and secretary of that society, and was a member of the Louisiana State Medical Society and of the American Medical Association.

He was regarded by the members of the profession as possessing unusual skill and knowledge, and by his gentle, kindly and ethical deportment as a physician endearing himself to the profession of Shreveport and the surrounding country.

*Resolved, further,* That a copy of these resolutions be sent to the family and that copies be furnished to the local press, to the *Medical Record* and the *New Orleans Medical and Surgical Journal*, and that a notice of the death of Dr. Coty be sent to the journal of the American Medical Association, and that the resolutions be spread on the minutes of this society.

Drs. O'Leary, Furman, J. C. Egan, committee.

PERSONALS.—DR. S. Y. ALEXANDER has been appointed Coroner of Shreveport in place of Dr. H. C. Coty, deceased.

DR. H. L. SANDERS has moved from Leesville, La., to Rosepine. The Doctor attended the last session of the N. O Polyclinic.

## Book Reviews and Notices.

---

*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

---

*A Text-Book of Physiology*, by ISAAC OTT, A. M., M. D. F. A. Davis Company, Philadelphia, 1904.

This is a text-book written for students, and contains a fair exposition of physiology as taught at the present day. One regrets that more attention has not been given to laboratory and experimental work, as the tendency of modern physiology is more and more in this direction.

One notes occasional inaccuracies which a future edition will doubtless correct.

VAN WART.

*International Clinics*, Vol. II., 14th Series, 1904.

The contents are unusually interesting to this section of the country on account of the symposium on diseases of the warm climates, a most interesting series of articles on such subjects as Hemoglobinuric Fever, Uncinariasis and Liver abscess. We also note among others the articles on the Limitations of the Utility of Digitalis in Heart Disease, Broncho-pneumonia in Children, etc. The more we see of its achievements the more we feel that this publication merits the support we have always given to its editor and publishers.

E. M. D.

*Tuberculosis and Acute General Miliary Tuberculosis*, by DR. G. CORNET, of Berlin, edited, with additions, by WALTER B. JAMES, M. D. New York and London, W. B. Saunders & Co. Philadelphia, 1904.

This is the seventh volume to be issued in Saunders' American edition of Nothnagel's Practice, and the remaining four volumes are in active preparation for early publication. The American edition of Prof. Cornet's exhaustive work appears at a time when the subject of tuberculosis has a peculiar claim upon the attention of mankind. Within a few years both professional and general public interest in the disease has taken enormous strides. In almost every civilized community societies for the prevention of tuberculosis are being organized, and these are composed not only of physicians, but of laymen, while governments themselves are taking an active part in the movement. Under these circumstances the work is of interest to practitioners, for there is no other treatise which gives an equally clear and comprehensive view of this subject.

The article on Acute General Miliary Tuberculosis has been admirably written and gives a thoroughly clear understanding of this disease.

The importance of the chemistry of the tubercle bacillus and its bearing upon immunity have warranted a thorough treatment of this subject.

The work is complete, is logically arranged and the editor has made additions where necessary to bring it down to date.

E. M. D.



*Surgical Asepsis*, by HENRY B. PALMER, M. D. F. A. Davis Company, Philadelphia.

The purpose of this book is to direct the operator who has to work outside of a hospital in order that he may secure asepsis. It is simple to operate in a well-equipped hospital, where the responsibility for preparations, instruments and dressings is shouldered by others who are properly trained. It is another thing to have to perform operations in places where no institution is available or when the patient can not be moved. Dr. Palmer has tried to indicate the precautions that should be taken and he has succeeded very well. All those who have to do other than institutional operative work can profit by the information conveyed in this little volume.

C. C.

*The Doctor's Red Lamp*, Vol. II. of the *Doctor's Recreation* Series, edited by CHARLES WELLS MOULTON. The Saalfeld Publishing Co, Chicago, Akron and New York, 1904.

This is a much better volume than No. I and consists of short stories concerning the doctor's daily life or in which a doctor takes a prominent part. They are well selected and are good; some pathetic, most of them humorous, they will all appeal to the medical man and, in fact, to any one who appreciates a good story. It is well worth having and reading.

C. C.

*The Perpetual Visiting and Pocket Reference Book*. The Dios Chemical Company, St. Louis, 1904.

This is one of the neatest and most complete visiting lists offered to the profession. The Dios Chemical Company propose to furnish a limited number. Those of our readers who desire this complete visiting list can have same by inclosing 10 cents in stamps for postage to the Dios Chemical Company, St. Louis, Mo.

---

---

## Publications Received.

---

**W. T. Keener & Co.,** Chicago, 1904.

*Student's Hand Book of Surgical Operations*, by Rev. Frederick Treves, M. D.

*Serums, Vaccines and Toxines in Treatment and Diagnosis*, by Wm. Cecil Bosanquet, M. D.

**The Cline Co.,** Chicago, 1904.

*A Text Book of Alkaloidal Therapeutics* by Dr. W. F. Waugh, with the collaboration of Dr. E. M. Epstein.

**W. B. Saunders & Co.,** Philadelphia, New York and London, 1904.

*A Text Book of Pathology*, by Dr. Joseph McFarland.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)

FOR AUGUST, 1904.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	11	3	14
Intermittent Fever (Malarial Cachexia) .....	3	3	6
Small Pox.....			
Measles.....			
Scarlet Fever.....			
Whooping Cough.....	2		2
Diphtheria and Croup.....	2		2
Influenza.....			
Cholera Nostras.....			
Pyemia and Septicemia .....	2		2
Tuberculosis.....	43	40	83
Cancer.....	11	5	16
Rheumatism and Gout .....	1	1	2
Diabetes .....	2		2
Alcoholism .....	3		3
Encephalitis and Meningitis.....	6	1	7
Locomotor Ataxia.....			
Congestion, Hemorrhage and Softening of Brain.....	15	5	20
Paralysis .....	1	2	3
Convulsions of Infants .....	2	2	4
Other Diseases of Infancy .....	8	3	11
Tetanus .....	3	6	9
Other Nervous Diseases .....	1	2	3
Heart Diseases.....	26	22	48
Bronchitis .....	3	4	7
Pneumonia and Broncho-Pneumonia.....	17	10	27
Other Respiratory Diseases .....	1		1
Ulcer of Stomach.....	1		1
Other Diseases of the Stomach .....	5		5
Diarrhea, Dysentery and Enteritis.....	14	12	26
Hernia, Intestinal Obstruction.....	2	2	4
Cirrhosis of Liver.....	9	4	13
Other Diseases of the Liver .....	3		3
Simple Peritonitis .....	2		2
Appendicitis.....	3		3
Bright's Disease .....	21	10	31
Other Genito-Urinary Diseases.....	2	5	7
Puerperal Diseases .....	3	4	7
Senile Debility .....	7	5	12
Suicide .....	3		3
Injuries.....	21	8	29
All Other Causes.....	24	12	36
TOTAL.....	283	171	454

Still-born Children—White, 29; colored, 16; total, 45.

Population of City (estimated)—White, 233,000; colored, 84,000; total, 317,000.

Death Rate per 1000 per annum for Month—White, 14.57; colored, 24.43; total, 17.18

## METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure ..... 30.05  
Mean temperature ..... 81.  
Total precipitation ..... 5.83 inches  
Prevailing direction of wind, southwest.

PAGING DUPLICATED

No. 5. P. 289





# *New Orleans Medical and Surgical Journal.*

---

VOL. LVII.

NOVEMBER, 1904.

No. 5.

---

## Original Article.

---

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints may be had at reasonable rates if a **Written** order for the same accompany the paper.]

---

### **Paratyphoid; with Clinical Illustrations and Comment.**

By T. H. EVANS, M. D., Philadelphia.

In this consideration of a special form of disease, certain etiology principles are to be brought out which the writer believes should be accounted for in any and all morbid processes. It is possible that modern methods and appliances may be to blame for an excessive attention to the impersonal and objective side of disease. Yet, in no disparagement of modern technic, we ought, nevertheless, to recognize that side of disease whose terms resolve to psychologic quantities.<sup>1</sup> The personal equation, if more interesting, may also be more intimate and exact. While somatic and physical values undoubtedly are excellent standards, it should be kept before us that great scientists and philosophers have existed independent of merely technical appliances; and that it is mind, not microscope, which lays hold of facts.

Typhoid, or enteric fever, like other morbid processes, is a modification of personality, and not an alteration of a purely static entity. In its principal as well as in its errant forms, we should be able to trace the factor of the patient's personal reaction. As was stated, this reaction may be expressed in terms of physiochemic change, but it can also be expressed in changes parallel, and basically identical to them, whose meaning will be the meaning of disease in personality.

A certain sameness in people accounts for the general or vulgar manifestations of disease; the atypic forms result from objective or subjective personal variations. On what is based the nature or personality of the patient? This we must consider before examining the nature of the influence of the adventitious or infectious element.

#### A. PROLEGOMENA. I. THE PATIENT.

The personal equation has four factors. These have their ground in the essential basis of consciousness. For, in consciousness, all existence takes its practical origin—that is, so far as existence can have any meaning in and for us.

Consciousness to a degree must be present in the simplest life, for it is that which rounds out and fulfils the life processes so as to unify them. It is consciousness which unifies the primitive or original protoplasmic faculties—contractility, irritability, reproduction and metabolism—and in so doing creates the self. The four protoplasmic faculties are the inseparable aspects of the reality which makes the self. The primitive protoplasmic faculties may be read in terms of physiochemic change, or in terms of organic effort and function.

In compound organic existence the heritage of self is divided; as consciousness specializes in values corresponding to essential values of tissue and organ. Consciousness, therefore, is not essentially cerebral.<sup>2</sup> The central nervous system is the great correlative force; that which must be the extent of its only claim. Self-consciousness may find its ideal seat in the nerve centres, but the reality of self is structure-wide.

Out of the protoplasmic four faculties, then, have come the many faculties of the higher organism. In the specialization of tissue there are four elementary histologic values. And while

admitting the share in all of the original faculties possessed in protoplasm, these separate histologic structures exemplify one each of the original faculties in evolution: Contractility in muscle, irritability in epithelial tissue, metabolism in connective tissue and reproduction in nerve tissue.<sup>3</sup> Nerve tissue is essentially reproductive of states of being—to transfer effort and correlate processes this faculty is developed. The connective tissues are supportive and nutritive. Epithelial tissue is the great sensitive and intensive factor. Contractility in muscle, as especially in cardiac muscle, is the fundamental executive force. To say that the nerve impulse exerted on the muscle is the executive force is poor logic. The nerve tract brings about harmony of action. But the heart, of itself, is able to contract, that is, to functionate, even after severing relations with the body. That it cannot do so indefinitely is because it does not possess in proportion the other facultative values. In support of my contention that force is essentially peripheral, the researches of R. G. Harrison<sup>4</sup> show that, in *rana palustris*, the spinal axis may be severed in embryonic life without preventing the development of musculature supplied by the damaged spinal segment; these muscles grow and are responsive to stimulus. Development, then, he says is not carried on entirely by central influence. To assert the unity of the organism and to allow for these facts we must assume the peripheral existence of self and essential force and consciousness.

Modern attempts to lodge the soul or self in the brain must fail, even as the attempts of the ancients to place it in the heart or liver. But the diffusion of consciousness, as based on a correlation of the essential protoplasmic faculties in their specialization, will lead us to appreciate the relation of the subjective and objective changes of the organism.

All change is the result of motion, and hence all organic change must be the expression of contractile protoplasmic values. These may be stated in physiochemic terms or in terms of personal initiative. Sensation results from protoplasmic irritability; nutrition from the trophic or metabolic force. And reproduction evolves into psychic or ideal reproductive series, and the somatic or body generation, as well as the physiochemic essential succession. In terms of personality the protoplasmic forces exert

what might be expressed as a facultative reflex. These reflexes are four:

- (a). The initiative reflex.
- (b). The temperamental reflex.
- (c). The nutritive, natural, or constitutional reflex.
- (d). The sexual reflex.

These reflexes are evidence of the organic status quo.

In simple, or unicellular, life they are probably the same as the original protoplasmic faculties. In higher existence the immense specialization and intricacy makes these reflexes amount to great functional standards. To them we must look for a clue to the personality of the patient.

They are to be read in terms of physiochemic, somatic, and psychic significance. Physiochemicly, Initiative, Temperament, etc., may mean essential or elementary changes. Somaticly, these reflexes may be parenchymatous or metastatic. Psychicly, they may be personal or ethical. In a previous paper<sup>5</sup> I have endeavored to explain these in detail. It is enough now, to emphasize the conscious unity of all these terms in reality. Drugs, food, sensation—all mean consciousness which can enter our experience. If entered objectively, we form no organic or essential union. A subjective assimilation means that the union is infinite, i. e. final.

These reflexes, moreover, are the true factors in evolution. Darwin<sup>6</sup> recognized the sexual reflex and the nutritive or natural reflex, in his factors of "selection." To complete the scheme and admit all the protoplasmic elements into the evolutionary process we shall have to add "Initiative" and "Temperament." Initiative and temperamental "selection" are most important in determining, not only the evolutionary process, but the alterations common to health and disease. It is then possible to see how evolution and selection as initiative, temperament, sexuality, and constitution, apply as factors in even the most trifling ailments; the microcosm mirrors the macrocosm; the most magnificent detail is carried out into the smallest process and thing; the laws of the universe must be looked for in the smallest, as in the greatest.

On the side of the *germ*, or pathogenic element, we can apply the principles of evolution as well. Sexuality, constitution, tem-



perament, and initiative have their parts to play; there may be observed, equally, physiochemic, somatic and psychic values. However, the scale of life to which they belong would seem to place the physiochemic changes in highest importance. At the same time, peculiar infections may be due to aggregate modifications, in which the germs of the mass play constituent parts. The pathologic perspective, nevertheless, will tend to dwarf any chance of individual opportunity to modify the course of health or disease.

## II. THE SPECIFIC INFECTION.

Typhoid or Enteric Fever is the result of changes due to *B. typhosus*. In the common clinical picture the factors of the disease will not show up so clearly as in certain paratyphoid varieties—those forms of the disease in which peculiar or special features assume an unusual prominence. Here in Philadelphia, where enteric fever is so prevalent, we are fortunate in having many borderland cases for study.

Paratyphoid is the name applied to these irregular forms of the disease. They may be classified as “abortive” and “complete,” and further as (a) *idiosyncratic*, and (b) *occasional* paratyphoid. The *occasional* forms are those of some modified typhoid infection; some modified bacillary action or toxin force. The *idiosyncratic* forms are due to some peculiarity in the personal reaction and to be explained only by reference to the particular state of the essential organic reflexes, namely, initiative, temperament, sexuality, or nutrition.

Recognizing the specific value of the typhoid infection, we may well ask what is “typhoid pneumonia,” what is “typhoid malaria,” etc. Either these are examples of mixed infection, or they are variants of purely symptomatic coincidence. Hemorrhagic typhoid, on the other hand, is a special reaction to the infection, which has been modified by idiosyncrasies on the part of the patient, and variations in the site of the disease.

Any or all of the essential mucous membranes may be the site of immediate attack, and in some instances the gastrointestinal *mucosa* is not included in the infection. Purely mechanical or opportune reasons may account for this, yet some idiosyncrasies must be called in as factors of this hemorrhagic form. Certain essential differences in the *B. typhosus* may exert an influence in the choice of the site of attack, or its duration. Variations in life

cycle may produce variations in quantity or quality of the toxins. Physiochemic changes may be the cause of a different personal reaction and a different condition of the essential organic reflexes. Previous disease may bring about alterations which pass over into the new equation. Immunity to one disease may predispose to others. The whole state of both organism and infective agent is to be taken into consideration. The law of evolution and selection works out in the problem of disease and health, the same and as well as in the wider world-processes. The understanding of these must be our effort.

### III. THERAPY.

There will not be space to go into a theory of the parallel indications for treatment. We know even now, how some drugs affect personality. Long continued administration of bromid tends to brutalize the patient<sup>7</sup>; alcohol breaks down the ethical instinct; cocain, the sexual nature; morphin, the power of temperamental evolution. In this we see certain relations shadowed as existing between the objective consciousness of drugs, i. e. physiochemic agencies, and their final subjective assimilation.

Long association of parts of the body with states of mind is causative of essential reactions. To assume a pleasant expression is most likely to induce a pleasant mental atmosphere. Torpid liver renders us melancholy. A rapid heart makes us anxious. Anxiety, on the other hand accelerates the heart, and worry may derange the liver. This is the achievement of the organic reflexes, and is representative of essential organic adjustment. Metastasis takes place in lines of least resistance, i. e. in lines of ordinary anatomic and physiologic relationship.<sup>8</sup> Treatment, therefore, may be directed to the metastatic trouble, or by direct administration, to modify the states of the organic reflexes. It may be a matter of taste, but, for me, the ready understanding of the patient afforded by an examination of his organic reflexes—initiative, temperament, sexuality, and nutrition—as worked out in his pathologic process, seems as exact, and as satisfactory in results, as a study of the physiochemic alterations incident thereto. It must be remembered, nevertheless, that their essential ground is one and the same. A combination of all methods ought to give the completest insight.

## B.—CLINICAL ILLUSTRATIONS.

The type of person modifies the patient's disease. In the following cases attention will be drawn to facts which especially illustrate the influence of personality:

CASE. I. Hemorrhagic Typhoid. Mr. H., aged 50. For five weeks had been feeling ill up to the date of my first visit, August 9, 1904.

Presented the typic typhoid facies, coated tongue, temperature of 39.2 °C., iliac tenderness, headache, constipation and general malaise, Widal neg. Mr. H. is a man of large build, good sized bones, broad shoulders, brachycephalic, square jaw and well developed limbs. He speaks in a middle register, with a rough quality, as if forcing the tone; speech is deliberate, at time hesitating. In health he never talks rapidly, but emphasizing by prolonging a syllable. His hair is thick, strong, and gray. Eyes normal distance apart, and steady. All his movements are characterized by deliberation and exactness. By trade he is a machinist and a wirenailer—being foreman of a shop at present.

With all his effect of strength there is a distinct trace of nervous irritation and hypertone which might amount to positive excitement in crisis.

He has never suffered severe illness since a child, when he had the usual maladies of that period. About 17 years ago was troubled with insomnia, while working as a machinist. Took electric treatment with some benefit and since then has purchased an electric battery which he uses, he says, when feeling below par; did so in the present instance.

His eyes are acute but anisometropic and astigmatic, never refracted. Does not read at length, but used to. Has rarely suffered from headache. But has noticed when weary, a tremor in the muscles under strain. Never tasted alcoholic drinks and uses no tobacco. Of acute mind in matters of common acquaintance. I believe that anisometropia tends to develop mental and visual acuity. The strain on neurotic individuals may determine some improper or dangerous reaction, however. The mooted reflexes of eye-strain offer an interesting field for study. In cases of anisometropia and astigmatism there is a peculiar forcing of the muscles of expression which indicates some sort of reaction. The

patient's brow furrows when he thinks closely. Habit has associated clear thought with clear vision; there is, then, some muscular factor to be added to the equation. For contractility and motion are always present in physiologic change, though it may be cellular, and not parenchymatous.

The patient's wife is a nervous, even hysterical woman, of good character but melancholic and over-religious. She is fearfully astigmatic and anisometropic, with wrong refraction. She suffers all and more that the most eager advocate of the theory of eye-strain has imputed to that reflex. The patient, I believe, is promiscuous in sexual relations; this is a factor of importance in the development of and functioning of his organic reflexes and their bearing in the course of disease he may suffer.

Our common experience shows us that types of patients undergo similar pathologic processes—some suppurate easily, some become neurotic, some strengthen with strain, and some never have done with complications and sequels.

Mr. H. was placed on dilute HCl, and 2 hour bathing, with the result that the temperature ran between 37.9°C. and 39.2°C. for ten days.

The symptoms of pain, etc., continued until *arg. nitrat.* and *ext. opii* were given, when all discomfort, except weakness, passed. Appetite improved, but milk was distasteful; this absolute milk and water diet was maintained, however.

Hcl is administered in nervous cases for the reason that not only the gastrointestinal effect is good, but in quieting the heart, which acidulous drinks do, the reflex nervous action, through the initiative reflex, is diminished. The temperamental effect of opium was good, and the nitrate of silver is a mechanical as well as chemic agent of advantage. I have noticed that nervous people, or those of ready motor discharge, dislike milk. The fatty element may increase nerve conductivity. I try not to disregard suggestions of patients, for their feelings are usually effective guides. So, while maintaining the milk diet, I allowed the patient to refuse or take milk whenever he would choose.

Large quantities of water, as advised by Riesman of Philadelphia, I find very beneficial.

August 16, patient had a severe attack of nosebleed, which lasted,



off and on, a couple of days. This returned a day after. The peculiar character of the discharge corresponded to what Samohrd describes as "leakage."<sup>9</sup>

He has reported 5 cases, in which different essential mucous membranes suffered. The effect on the typhoid attack is variable. In some, the fever falls with the discharge, to rise again in a day or so. In others, rather erratic variations occur, such as extremely high or extremely low temperature, and in some cases there is no effect on the temperature.

Some local infection is the cause of this metastatic reaction. The patient may carry the infection by the hands, or it may pass through one of the many body channels.

These critical discharges occur more frequently in the nervous or neurotic, or in those of a strong initiative reflex, or in those under some peculiar strain. I believe these discharges may occur in a manner analogous to the convulsions which complicate any severe infection, the toxins bringing about some excessive or even epileptic, discharge of force, and with a subsequent relaxation. In this case no change was made in the treatment because of these hemorrhages, as none seemed especially indicated. I did, however, exert a little personal influence on the patient who seemed to become gloomy at this period of the disease.

Epistaxis, either before or during an attack of typhoid fever, should be looked on as a reaction, very likely immediate, to the specific toxin. The nosebleed which precedes an attack to all appearances, may, in reality be an actual typhoid process. This local process may give rise to the gastrointestinal disease, or originate in it, as yet undiagnosed.

To continue the history. In the second week, daily enemas of lukewarm water were instituted. The arg. nitrat and ext. opii stopped, with continuance of good effects. Protonuclein added. Some bronchial symptoms now developed. The sputum, while not abundant, had a slight tinge of blood. It is possible that the bronchial mucous membrane had received the specific infection. In a few days this, too, had passed. Fever, now, rarely reached 38.4°C. The typhoid facies and other symptoms disappeared. Increase of appetite.

At this time, some family trouble or dispute caused a slight rise in temperature. An acetanilid, sod. salicylat., caffein citrat., sod.

bicarb. capsule given afforded a steady control of the fever and in a week a drop to normal, when the prescription was withdrawn without return of temperature. The wife, with a curious unconsciousness of the patient's feelings, would often remark on her weariness, while attending to her duties as nurse. I think this added a nervous element to the case. I could see that her unthinking remarks caused him anxiety. Their financial state made a paid nurse an impossibility, indeed the family had no income whatever, during this illness.

Some ten days of fever undoubtedly preceded my first visit and I allowed for this in calculating the stage of the disease. However, I find an increase in tone, or in the initiative reflex, as correlated in the nervous system, in normal people is causal of more rapid recovery, though in neurotics just the reverse. Treatment must be directed to this factor of the organic reflex to obtain its assistance. Our therapeutics must learn the fundamental reading of its forces as well as their symptomatic effects. These effects serve as excellent indications, however.

August 25, Widal positive on first trial. Temperature normal. Strychnin nitrat, gr. 1-30, every 4 hours, ordered.

This proved overstimulation, and was withdrawn. For it manifested in a slight but persistent leakage of blood from the pharyngeal and faucial mucosas. This leakage I consider evidence of additional infection but exaggerated by excessive vasomotor tone. Protonuclein being exchanged for the strychnin. nitrat., the leakage diminished readily. Light diet was ordered September 1.

CASE II. Hemorrhagic Typhoid. Miss Emma B. Aged about 24. This case I have previously reported<sup>10</sup> but did not publish my notes considering it from the standpoint of the influence of organic reflexes. Without reviewing the usual typhoid course, I will recall the hemorrhagic symptoms, which were limited to three days' profuse vaginal discharge of blood of a bright color, two weeks after a normal menstruation.

The temperament of the girl is full and eager, her character quick, impressional and passionate. Of brunette type, with voice of a full middle-low register, rather dolichocephalic, eyes a trifle closely placed. Rapid in speech and of nervous demeanor, even in health. She has been doing eye work of great exactitude, with

eyes anisometropic and astigmatic, and no eye-refraction—this in reference to temperament and the influence of that reflex.

The mode of local infection in this case is to be considered.

CASE III. Subacute Typhoid. Miss Sarah W., aged about 60. I attended her in March, 1904, when she complained of severe lancinating pains along the fifth and sixth right costal margins—extending from the vertebral axis to the region of the midclavicular line and the neighborhood of the right breast. There was no observable lesion and no temperature, although patient told me she had been treating some weeks, for pleurisy. I diagnosed intercostal neuralgia; later, I thought there might be a degree of periostitis.

In about ten days the temperature rose suddenly one night to 39.9°C. with chill and malaise, after which a daily rise and fall and typhoid symptoms developed; but the local pain continued, although not so severe. The typhoid symptoms twice disappeared, and twice, after a week's normal temperature, light diet was resumed and as often had to be given up on account of more febrile attacks.

Treatment consisted of usual cold water bathing and various medication. Dil. HCl, salol, arg. nitrat., ext. opii, etc., etc., and protonuclein. Large quantities of water were administered, as Reisman advised in consultation.

After final recovery the pain along the costal margin continued until a prescription of tr. ferri chlorid. and liq. pot. arsenitis was ordered; this mixture gradually reducing the discomfort, although traces of pain continued several months.

The duration of each of the three febrile stages was about 7 to 10 days only. Widal positive in the final attack; negative before.

The patient is an active, intelligent, although selfeducated, woman. She speaks in a rather hurried fashion a little above middle register. Although untrained, is in demand as a nurse. She is of slightly brunette appearance; the bones are of moderate development and her physique indicates fair health. Temperamentally there is evidence of her excessive regard for rather unimportant detail. In money matters she views her friends and relatives with suspicion, possibly a just suspicion in one instance. This may account for certain temperamental reflex evidences,

which cropped out in her anxiety during illness. She is selfreliant and cheerful. It seems likely that she has suffered many years from a lithemic manifestation. There are vague symptoms of former biliary lithiasis. The eyes and other senses appear in the condition proper to her time of life, although I believe that her nervousness may be due to a reflex from unrefracted presbyopia.

### C.—COMMENT.

The word *typhoid* receives a wider application than it should, because of its ending in "oid" meaning like unto. We ought to restrict it so as to apply only to specific infections. Baccelli<sup>11</sup> has spoken of "subcontinuous typhoid," by which he really means Malaria.

Typhoid pneumonia commonly means an asthenic or prostrating pneumonia.<sup>12</sup> This should not be. Paratyphoid will not include such cases. Paratyphoid applies to atypic instances of specific typhoid infection alone.

Typhoid infection is a relatively constant factor. The different manifestations of typhoid, therefore, must be due to variations of personal influence. What effect then, is exerted in the disease equation by the patient's personality and his organic reflexes, i. e., his states of initiative, temperament, sexuality, and trophism?

The organic reflexes have no existence in and for themselves but are indicative of organic interrelations. Sensation and perception, both from within and without the body, the effects of metabolic processes as well as the evidence of the senses, go to make up the variants of temperament. Add to this the essential body-structures as the prime factor, and it will be plain that in health and in disease, with the continual operation of the principles of evolution, the personality is bound up in a temperamental reaction. The immense influence of sexuality is to be reckoned with. Both in and for the individual and in and for his associates this factor exerts a modifying influence. The correlation of the sexual and the nasosensory centers in the hippocampal gyrus, and elsewhere, as it may be, is recognizable by effect. This may have something to do with the practice of animals, and of savages, who use the nose as an organ of greeting. Whether this reflex is due to associated activity or is the result of a primitive division of function, is to be considered.



The peculiar arrangement of the material in the glands of secondary sexual secretion, and the similarity of structure with the suprarenal medullary matter, as well as the control of organic initiative thereby, e. g., vasomotor tone, trophic modifications, and associative action, is to be kept in mind.

Typhoid prefers young, healthy males. Yet the physiochemic equation may be imitated in others, and doubtless is, by some substitution of radicals. Does the pathogenic element first modify the subject of attack, or does the personal equation vary so as to admit the possibility of this attack? If immunization is a fact, the latter should be affirmable as a converse proposition.

It will be necessary, then, to discover the physiologic reading of the modifications of nutrition, temperament, etc., which constitute these primary personal factors. Sexual characteristics<sup>13</sup> are largely determined by the state of the principal and secondary effects of the peripheral gland. Trophic influence is exerted on the osseous system<sup>14</sup> by the pituitary body. Initiative is strongly contained in the cardiac muscle. Temperament is effective, and takes its source in the reaction of senses and body processes and states of being. The psychic factor is added in the correlation of all this in and through the central nervous system—when the “self” views itself as the “other” in order to perceive and determine itself. The whole principle of life and biologic organization is bound up in this correlation of the aspects or faculties of protoplasm—the effective, the affective, the personally reconstructive or retentive, and the personally reduplicative or extensive. And these protoplasmic properties are based on the physiochemic potential of *gravitation*, *chemism*, etc. Nothing can act where it is not. In the coinfluence of elements all the wonders of the highest evolution and life are certainly present. In the unity of existence the fact of consciousness exemplifies itself.

Hydrogen consciousness, for example, however, finds its fulfillment in the world about it, in which it is an integral part. An organic or somatic consciousness draws the world into the microcosm. Inorganic consciousness looks one way, organic looks the other.

What has this to do with Paratyphoid?

Just this, that this disease as any other, is a modified individu-

ality, and must be approached with regard to especial and distinct characteristics—by no means adventitious. These are to be understood by the several representative indications. Whatever the treatment, it must conform to similar characteristic indications.

It is curious to know whether physiochemic agents as administered to the patient, control disease by encountering the infectious element, destroying toxins about to attack the individual, or whether they must first assimilate with the patient to attack the pathologic forces. Does the salol, the strychnin, become “patient” first, or does it fight merely in an auxiliary role, never to join personalities?

On the other hand, do the toxins and micro-organisms induce the pathologic condition by purely temporal and spatial rapprochement, or do they enter the chain of physiologic activity? In paratyphoid the nervous element, the suppurative element, the phlogistic tendencies, represent the certain effects of the *B. typhosus*; more than this, however, lines of less resistance in the patient. If hemorrhagic typhoid be due to suprarenal involvement or other cause of altered vasomotor tone, as well as metastatic infection, this will explain certain *pari passu* occurrences, or at least point the channels of transference.

Curious abdominal sensations accompanying emotion, while not proving the ideas of the ancients as to the abdominal root of sympathy and compassion, surely show the fundamental relation of temperamental and physiologic processes and indicate to an extent the nerve tracts and structural basis of it. With a better conception of this, we should be able more exactly to control and eradicate disease.

There is no space here to give experiments made by the writer with nutritive and therapeutic agencies to determine their temperamental and other values. There are references to some of these, earlier in this article; the reader must make the application. But along this line of study a neglected yet fertile field is waiting.

#### REFERENCES:

- (1) Author: A Theory of the Symptom-Reflex, *Am. Med.* Vol. VIII, No. 9.
- (2) Author: *loc. cit.*
- (3) Author: Temperament, etc., *Med. Times*, Supt. 1904.

- (4) R. G. Harrison: An Experimental Study, etc. *Am. Jour. of Anat.*, Vol. III, No. 2.
- (5) Author: Concerning the Organic Reflexes, (to appear.)
- (6) Darwin: "Origin of Species," etc.
- (7) J. W. Wherry: "Results, etc." *Am. Med.* Vol. VII, No. 2, and  
Spratling: Epilepsy and its Treatment, p. 365, Philadelphia 1904.
- (8) Author: A Theory of the Symptom-Reflex, *loc. cit.*
- (9) Samohrd: Hemorrhagic Typhoid, *Sbornik Klinicky*, Vol. V, No. 1.
- (10) Author: Paratyphoid; with report of a case of the Hemorrhagic Variety, *Med. News*, Sept. 3, 1904.
- (11) Baccelli: Subcontinuous Typhoid, *Il Policlinico*, Rome, No. 20, 1904.
- (12) *Am. Med.*: Editorial—Book Review, Vol. VIII, No. 9.
- (13) Editorial: "Recent Studies, etc.," *Il Policlinico*, Rome, No. 33, 1904.
- (14) Editorial: *loc. cit.*

---

## Louisiana State Medical Society Proceedings.

---

[EDITED BY PUBLICATION COMMITTEE]

P. L. Thibaut, M. D. Chairman.

### A Case of Circular Insanity. With Consideration of Periodicity of the Emotional States in Its Casual Relation of the Phenomena of This Psychosis.

By E. M. Hummel M. D., Jackson, La.

This type of insanity, a case of which is here related, is a psychosis with well marked characteristics, and is easily recognized upon adequate observation. It has been considered a distinct form of alienation since 1853, when Falret and Baillarger independently, and almost simultaneously, described it. At the present day it is generally recognized by writers on insanity. In this psychosis we have alternating in recurrence two mental phases diametrically opposed in their essential qualities: those of mania and melan-

cholia; and in the wake of one or the other of these usually comes an interval of sanity. Thus, then, its course is made up of alternating intervals of mania, melancholia and sanity, succeeding each other in almost any order, hence the name circular. Each of these may vary in duration from a few days to several years, in different cases; but there is a tendency to uniformity of length in the phases in a given case, both as regards the three intervals when compared with each other, and in successive recurrences. The maniacal phase is apt to be the most pronounced in intensity and longest of duration in some cases. This disorder usually makes its appearance about puberty or early adolescence, and is more frequent in women than men—both facts of etiological significance. Like so many other types it, almost of necessity, has as a basis a badly poised central nervous system, deficient by way of acquired or hereditary instability, in the vast majority of instances hereditarily deficient. One of the most distinguishing characteristics is the profound involvement of the emotional or psychic states, effecting the striking variations wherein are presented the two great extremes of emotional range, involved in melancholia and mania. We might with some propriety call this a disease of the moods, in that the different phases of its manifestation are essentially morbid accentuations of the moods common to most sane people; while the intellectual faculties are involved only secondarily, and then usually to a slight extent, considering the intensity of the emotional disorder. Presumably this is the type of alienation that gave rise to the supposition long ago that insanity was caused or influenced by changes of the moon—whence the terms lunatic, lunacy, etc. It is not of frequent occurrence. Only six cases, out of a total of over 1,300 patients at the State Asylum, have come to my notice.

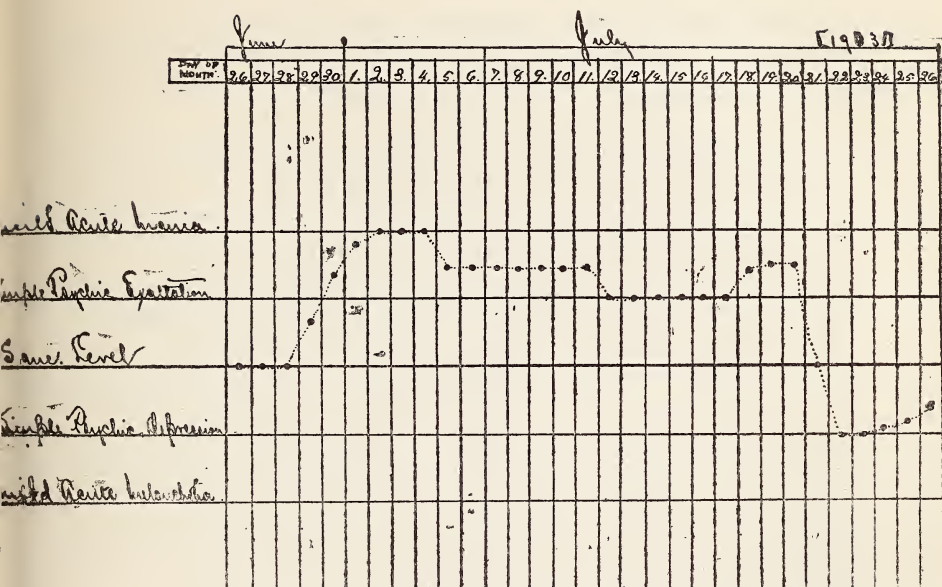
The patient is a white woman, born in Ireland, married, admitted to the Louisiana State Insane Asylum, February 17, 1892. She has borne children, at least one of which is known to be living, healthy and sane. Her age stated to be 36 years at the time of admission, which would make her 48 years old at present. Appearances seem to indicate that she is older, in that she is decidedly gray, and the features are those of one at least 55. She is alleged to have been insane for five years prior to admission. If this is



correct, it fixes the beginning of the attack at the age of 31. It is extremely probable that the attack began much earlier, inference being that the affliction was not so severe as to necessitate her commitment to an institution. The five years previous to admission to the State Asylum were spent at a private institution. No further history is obtainable. At present all of her body functions are fairly good. There are no marked stigmata of degeneration, though temperament is neurotic. The description of one of her attacks will be limited to observation of her appearance and behavior during a complete circle. The length of the circle from which the following notes were taken was about 32 days—the record covering 30 days. Two days after the written record was discontinued the same level was again reached. I have prepared the accompanying diagrammatic chart with the view of giving a better conception of especially the emotional variations of the attack. While this is not the constant length and order of a cycle, it is fairly typical. However, the stage of depression or melancholia is almost always longer and more profound.

On June 28, patient is found quiet, orderly and as nearly sane as she ever is now. I may remark here that the long duration of her insanity has tended to obtund her faculties and impair somewhat her powers of association. So that during the emotional norm there is some dullness of apprehension with slight confusion and incoherence. In other words she has suffered slight dementia. This is all the permanent reduction of the intellectual faculties after more than 17 years of alternating melancholia and mania. Clouston refers to the singular fact that this class of cases are slow to become demented, some never becoming so. He cleverly explains this by reasoning that the brain, if given a respite after stress, will recuperate and repair itself—the period of respite corresponding here to the same interval. More correctly then, the patient is, at stated date, emotionally sane. On the 29th she is somewhat elated. There is too much of the initiative about her. She moves about frequently, answers very readily when spoken to, ideas seem to flow more quickly, the face is more animated, special senses seem more acute. She is distinctly different in her bent and conduct from the previous day, and the essential difference is toward exaltation of the emotional state. On the 30th the above state of things is exaggerated, there is more exaltation, with corresponding

behavior. On the 1st, 2nd, 3rd and 4th of July she is at the height of her maniacal paroxysm. Her mental condition now amounts to acute mania, though mild and of tincture peculiar to these cases, a hilarious mania. There is greatly accelerated flow of thought, motor excitement and incoherence. She is more or less constantly in motion, talking, laughing, singing dancing; and is irrepressibly happy. The facial expression is very animated, depicting the lively play of the emotions. At stormy moments ideas seem to flit through her mind in kaleidoscopic fashion, and every thought that arises apparently is expressed; so is every impulse obeyed. There is no telling one moment what she will say the next; no one thought or theme seems to hold the ascendancy any length of time; but there is a tendency to profanity, obscenity and eroticism—more especially the latter. When spoken to she will almost anticipate you with an answer, and many of her remarks are witty and to the point. She sleeps very little at this stage, sometimes going several days and nights without any sleep whatever, with no apparent brain fag, spending the night talking, singing and scampering about the room. In short the picture she presents is one of great exaltation with loss of inhibition, under which state of things the mental mechanism is literally running away. She continued in this condition with slight variations in the degree of exaltation, as indicated by the chart, from the 4th to the 20th, State seems sane on 21st, while, on the following day, she has reached a condition of psychic depression. Transition from maniacal state to melancholic usually occurs within 24 hours, and then at night, patient going to bed in one state and waking up in the other. The animated facial expression is now gone, and in its stead is a dull, listless blank, or lack of expression, or else the features may be drawn in expression of painful sensations, when there is psychalgia. She sits perfectly still most of the time, and can scarcely be made to speak. Her appearance and everything about her are in most striking contrast to those of two days ago. All her movements, speech and behavior are indicative of the torpor and depression that have come over her. She harbors gloomy thoughts, but usually there is no distinct delusion. On July 26 she is still dejected, but not so much so, having gradually come out from the depression. She reached the same level on the 28th.



In regard to treatment; it is possible to shorten and render less severe the maniacal attack with moderate doses of belladonna; cannabis indica and the bromide of potash have a like value. I have used belladonna with this case on several occasions, at the beginning of the mania with fairly good immediate results; but the next paroxysm came with the same regularity and severity. It is seldom necessary or justifiable, however, to treat the mania with depressant drugs, where the excitement is mild. Diffusible stimulants, caffenin, aromatic spirits of ammonia, strychnin, are of some benefit during acute depression. But no known drug or measure has any considerable tendency to prevent successive recurrence of attacks once the disease is well established, and where bad heredity is marked. If it were always possible to institute mental hygienic measures at the incipency of the disease, and the patient induced to lead a simple, even life away from body and mental stress, cures would doubtless be accomplished; in fact they have been, even in cases of some duration. In those cases reported cured the drugs above mentioned and proper asylum regime were the chief adjuncts. In this, however, as in so many other varieties of insanity, when we come to consider the possibility of a cure the factor that gener-



ally turns the scale for or against the patient is the relative extent of hereditary instability present. Treatment does not ordinarily avail much in an effort to circumvent bad heredity.

When we approach the subject of the causes immediately determining the phenomena of this peculiar psychosis, many difficulties of an intangible nature present themselves. If it is to be presumed that every erratic prank played by the faculties in mental derangement must be explained by lesions of the intimate structures of the cortical cells, then comparatively little is known of the pathological anatomy of insanity, and this circular form is entirely without known morbid anatomy peculiar to itself. How could it be expected that much would ever be known of such lesions, obviously because they would be impossible of investigation. But such a view of the subject is untenable, as we would have to presume these lesions to be absurdly fleeting, in so much as the phenomena they supposedly originate are of this nature. That all psychic phenomena are accompanied by correlative metabolic events in the cells of their origin is the opinion of psychologists today. But such do not, of course, amount to lesions, though they may tend to produce them. Clouston, in reference to the fleeting, varying psychosis like the present, holds that to assume every phenomenon of mental alienation to have its respective lesion of the ultimate brain structures is unreasonable and implies a decided misconception of the questions involved. These statements do not, of course, apply to such types as have a definite pathological entity, as paresis. Rather, then, in the present instance, should we proceed to study the brain in action, and the visceral and body conditions which are conceived to be, in great measure, responsible reflexly for the morbid working of the cerebral cortex. Of course, for these influences to become efficient causes of alienation there must be instability of the central system—of peculiar cast. By noting the emotional phenomena of normal conditions, and drawing attention especially to their periodicity of occurrence, it is hoped that facts will be brought out which will lead to a better understanding of some of the features of this psychosis.

Beginning with conditions of perfect health and sanity, it is observed that the emotions do not issue at a uniform head level, but fluctuate between states of exaltation and depression, functional



commotion and melancholy calm, action and reaction, as it were. We are accustomed to speak of these states as moods, and we all commonly experience them. That the humors do fluctuate under conditions entirely independent of immediate extrinsic influences seems evident enough. To discern the causes of such intermittency in the emotional manifestations is another and very difficult matter. Clouston says "One of the most fundamental of the laws that govern the higher functions of the higher nervous centers in all vertebrates is that of alteration and periodicity of activity and inactivity." After this eminent alienist the opinion is prevalent that there is inherent in the higher nervous centers a tendency to alternating heightened action and relative inaction.

The whole nervous system seems to share the same influence; intermittency in the symptoms of nervous diseases generally, as neuralgia, migraine, epilepsy, "the motor analogue of insanity," is significant. Generations of emotional force, one of the higher functions of the high nerve tissues, is of necessity involved and in a very marked degree. What material conditions obtain in the nerve cells during these phases of emotional play we do not know. That they do have some physical correlative event in the cells of their origin seems patent. The reproductive propensities operate periodically in both sexes, but more especially in the female and, in the latter case, the tendency is to great precision and regularity of recurrence. The insidious yet profound and all pervading influence of the generative nîsus upon almost every other nervous manifestation is well known. Increase of the sexual nîsus always affects the emotions toward exaltation. These phenomena are seen in a most striking degree in the lower animals, many of which are completely transformed in their habits and proclivities during the time corresponding to their reproductive activity. So much for those tendencies that are inherent in the nervous centers themselves, and that operate as an inevitable law of their being. Such are responsible for those universal and seasonable states of the organism. Daily, almost hourly, fluctuations in the emotional states, independent of intrinsic causes, must be accounted for in another way. It is fairly well established that certain conditions of the viscera throughout the body, especially those below the diaphragm, may impress the emotional state very perceptibly, and that not necessarily through alteration of the quality of the blood current. Not that any of

these are the seat of the passions, as was formerly believed, but that the emotional states do sympathize with those of the viscera is a perfectly rational conclusion. While visceral functions are in great measure controlled by the sympathetic nervous system, independently of the cerebro-spinal, the sympathetic system is dominated by centers in the cord, and these spinal cells in turn are presided over by ganglia in the substrata of the cerebrum. The latter cells are the ultimate centers controlling general vegetative and trophic functions. Sensations from visceral states represented to these centres are diffused reflexly through the other strata of subconsciousness, and are not projected directly upon the field of consciousness unless they amount to pain, or are of great intensity; so that we remain oblivious of the conditions, or even existence, of our viscera. Nevertheless, these subconscious impressions, or rather their effects, well up into consciousness as vague, indefinite humors capable of influencing the frame of mind. Bevan Lewis says that the total sum of the visceral sensations under normal conditions go to constitute the essential personality, the ego. That the viscera are subject to shifting metabolic states is inevitable. As a matter of course, then, they will affect the psychic states accordingly. So long as visceral events transpire within the bounds of health the impressions upon a healthy and stable, central nervous system will serve only to effect moody variations. If torpor or slight functional disorder arise, the subject is apt to experience a morbid accentuation of a mood. If the visceral state is excellent the emotional state will be enhanced. In the presence of brain instability or actual insanity, sensations arising from visceral disorder may give rise to hypochondriasis, melancholia or definite delusive concepts. Clouston cites the case of a patient otherwise insane, who developed the delusion that there were snakes in his stomach. Upon post-mortem this man was found to have gastric carcinoma. Hammond believed unusually intense visceral sensations, operating during sleep, capable of originating or giving color to dreams. In my daily contact with patients at the State Insane Asylum I have frequently noticed that many of the chronic cases, patients whose faculties have suffered reduction in a variety of and who have just enough mental stability to enable them to get along, in their crippled way, under a simple, even, favorable regime,

are subject to very perceptible psychic ups and downs which are often referable to slight visceral disturbances, as hepatic torpor. These manifestations seem to me to be simply the psychoses of fluctuations in body metabolism.

Now, whatever may be the aspect put upon a mood by the higher faculties of mentalization as influenced by attending circumstances, its essence seems to be the relative intensity of the emotional or psychic state underlying it. Every sane person experiences recurring intervals during which there is felt a disposition to mental exertion, the intellect being clearer, the mental mechanism working more smoothly, at the same time the psychic pressure is higher, all the sensations are pleasant and of an exalting nature; the *bien etre* is more intense. On the other hand when there is an indisposition, or even inability, to put forth mental exertion, there is absence of exaltation, languor, and maybe discordant sensations with irritability. The essential difference between these two extremes of moody variation is the relative amount of psychic exaltation present. With some these emotional variations are greater than with others, a matter which is regulated by the temperament and the relative efficiency of mental equilibrium. Temperament we look upon as a kind of diathetic or life-long nervous disposition, gauging the amount of psychic force generated, and associated with a corresponding physical condition upon which it rests as a basis. The equilibrium here spoken of is regarded as a subconscious, inhibitory force which serves to keep the emotional impulses reined within normal bounds, limiting thus the extent to which mentalization is affected. It will be seen that the emotional output differs in each individual, even as the temperament differs, and that variations in its manifestation are kept within the mean by factors which, in their turn, are constant only in each respective instance.

Consideration of the foregoing facts will, it is hoped, be of assistance in arriving at a better understanding of the phenomena of circular insanity. As stated repeatedly before, the ever present factor is stability of brain, wherein is involved especially that function which fixes the equilibrium of the emotional play, or rather restrains it within the bounds of sane moderation. Which function impaired or destroyed it is easy to conceive how the intellectual mechanism unduly buoyed or depressed by the underlying

emotional state may slip from under the influence of the weakened inhibitory power, transcend the bounds of sanity, and run riot under the impulse that swayed it. Thus the mechanism is sent on a vicious circle, kept up likely by interchange of cause and effect, until the equilibrating force again gains the ascendancy and a reasonable order of things is re-established.

Among the several factors which have been adduced as likely operating to effect the emotional states, it is probable that the reproductive function is the one of most import, especially in the female. Woman is notoriously a moody creature, and the influence of the reproductive nismus, the menstrual epoch, upon her moods is indeed very great, serving, as it does, to sway and bias her whole mentality at times. The catamenia under perfectly normal conditions always occasions at least a mild, emotional flurry, effecting exaltation of the psychic state principally. In the insane this function not infrequently produces profound, though transient, mental reduction, and that without derangement of the function *per se*. I have reverted to this subject for the sake of calling attention to the conformity in length of the circle in the case cited, to that of the menstrual epoch, and of offering the suggestion that the menstrual function in this particular case very likely determined the length and manner of recurrence of the paroxysms. And now, though she has passed the menopause, the central nervous system continues to energize in the same manner as the result of long established habit. The case was selected from others available because of this peculiar feature, which would seem to give it special interest.

#### BIBLIOGRAPHY.

- W. Bevan Lewis on Mental Diseases.
- Clouston, Lectures on Mental Diseases.
- Blandford, Insanity and Its Treatment.
- Berkley on Mental Diseases.
- Hammond on Insanity.
- Church and Peterson, Nervous and Mental Diseases.
- Starr, Organic Nervous Diseases.
- Bannister and Brower, Manual of Insanity.



## DISCUSSION.

DR. J. B. GUTHRIE, of New Orleans: I think it is a subject for congratulation that after a long silence something is heard upon this subject. The subject has not received the attention it deserves at our annual meetings. As an instance of the treatment of insanity here in New Orleans I will mention the case of a student in the college who was stricken with acute melancholia and there was no place for him except in the police jail. In ninety-nine cases out of a hundred that go to the institutions after having been in charge of men who should know better, the colon is full of fecal matter and the patient under the influence of morphin. The institutions from which we derive our medical education absolutely ignore this branch and I think it is a good sign when we see papers on this subject. Perhaps there are many who do not care much about Dr. Hummel's paper, possibly because it was Greek to them but the time will come when such papers will receive better attention from this Society. I congratulate the Doctor on having broken the ice.

DR. HUMMEL, in closing: I want to thank Dr. Guthrie for his remarks. I believe the lack of interest in this subject is almost natural. The average practitioner of medicine does not often see a case of insanity, and when he does see a case it is not likely that he is called on to treat it. In the vast majority of cases he is simply asked to give the patient something to keep him quiet and controllable until the relatives can remove him to an institution. Consequently the treatment cannot be rational or complete. To physicians who are in contact with the insane and who have charge of these people and the treatment of their cases, the subject becomes very interesting and in fact very fascinating. There is a certain art in the management and treatment of these cases which must be developed by practice. I consider the management of insane people just as important as the administration of drugs. In certain conditions improper management and the administration of narcotics and depressant drugs early in the case serve to defeat rational treatment. When I commenced the study of this subject I had to undergo a kind of revolution in my opinions. I thought that depressant drugs were the main things but I found out they are not by any means. In most cases the physician starts in treating by building up, and he may give a drug which would at first thought

seem to excite the patient's disorder, but the object is to give a tonic treatment and bring about general body health. I am not in a position to say much about the State Asylum, being only an assistant, but I will venture the remark that if more medical men in Louisiana were to visit the institution and see what is being done for the care and treatment of the insane of the State they would profit by such a visit. And I think most of them would be surprised to see what an excellent regulated institution we have considering the vast number of cases being cared for, nearly 1,400 at present.

---

### **"Pruritus Considered from a General Standpoint."**

H. E. MENAGE, M.D., Chairman, Section on Dermatology, New Orleans.

It was after considerable deliberation and hesitation looking over dermatological subjects of interest to the general practitioners, that I chose the subject of pruritus for this occasion. It is not with a view of throwing much light nor to bring forth startling evidences in favor of any special line of treatment that I chose this subject, but mainly for the purpose of compactly reviewing the features, varieties, causative factors and especially the treatment of this most troublesome condition. This affection may appear to the minds of many here present as too trivial and unimportant to be considered at all and in many cases the general practitioner dismisses such cases with a few off-hand suggestions and thinks no more about them. It is, therefore, to the doctor who has seen many and treated patiently such poor sufferers that this view will appeal and a comprehensive exposure of the etiology and treatment of this disease will interest; for there are few conditions that tax the patience and therapeutic resources of the general practitioner, and specialist as well, as an intractable case of pruritus of any description.

With the belief that the foregoing apology is accepted for choosing this apparently simple and insignificant subject I will proceed to review the main features of its differentiation and treatment, and consider mainly pruritus as a disease *per se* and only incidentally touch upon symptomatic pruritus.

Pruritus (as the etymology of the word implies, means to burn, to itch; from the Latin "*prurire*" to itch, and from the Sanskrit *Prush*, to burn) is divided into two general classes:

Pruritus, a symptom of many skin diseases with evident lesions; and pruritus a disease without evidences on the skin and a disease *per se*. Symptomatic pruritus is a condition easy of relief, its cure being in a direct ratio with the obstinacy of the disease causing it.

It is, therefore, necessary to insist from the start upon a thorough examination of the patient, putting into requisition both senses of sight and touch to determine the disease causing the pruritus and differentiate it from all other diseases having the same location, that the proper treatment be instituted. Without the above care the treatment will often fail when it might otherwise have easily and promptly relieved the condition.

\* \* \* \* \*

Pruritus, the true pruritus with no objective symptoms or primary local inflammatory evidences to account for the itching, we are called to treat and which so often taxes our resources beyond measure, belongs essentially to the neuroses of the skin.

It is designated as a functional disturbances of the nerve supply (?) of the skin, and, according to the French school, of the sympathetic system particularly, and does not depend upon premonitory and appreciable lesions of the skin. The characteristic features of this disease is that it must not be due to evident lesions, unless secondary and not considered as causative elements, and is the condition called by the old writers "*Prurigo sine Prurigo*."

Dr. E. B. Bronson, in the *Medical Record*, after reviewing at length and analyzing thoroughly the various nervous and psychic influences that bear upon sensations in the skin, arrives at the conclusion, with the French idea, that a special pruritic sense exists and summarizes the predisposing causes as follows:

A. A state of cutaneous hyperesthesia or morbid and excessive irritability of the cutaneous nerves. It may occur—(1) as a local expression of a general neurotic condition either congenital or acquired, in which case the simplest excitants, such as friction of clothing or changes of temperature, may suffice to evoke sensations; or, (2) it may be due to local changes in the skin, attended with prolonged irritation of the cutaneous sensory nerves.

B. A state of hypopselaphesia, *i. e.*, a state of impaired condition in the cutaneous nerves of tactile sense. Though usually occurring as a concomitant of hyperesthesia of the skin, it is possible that it may exist independently of the latter, as an atrophic



condition (more particularly in *pruritus senilis*), when, like hyperesthesia, it becomes the predisposing cause of itching.

*Exciting Causes.*—A. Irritations conveyed to the skin from the interior of the body, either as 1st, reflex irritants; or as 2nd, irritations transmitted from nervous centers.

B. Direct or local irritations: 1st. From extraneous sources, *i. e.*, from such irritants as operate upon the surface of the skin; 2d. from intracutaneous sources, comprising, 1st. lesions of trophic cutaneous diseases and their products; 2d. toxic or noxious materials deposited from the blood. 3d. Effects of local nutritive disturbances, or deranged metabolism in the cutaneous sensory nerves. 4th. Spastic contraction of the *arrectores pilorum* which, though it may not of itself suffice to cause itching, is probably often associated with other causes as a contributory factor.

The disease sometimes appears spontaneously and manifests itself by sensations somewhat variable in kind and intensity; sometimes itching, sometimes by burning sensations, sensations of heat and formication, rarely continuous but almost always coming by crises more or less frequent.

These crises are particularly brought about by irregularities in diet, changes of temperature, heat of the bed and too violent exercise or forced rest, emotions and psychic disturbances generally. The annoying sensation begins at a determined focus of the body, gradually, and at times rapidly, increasing until it reaches an intensity almost unbearable; the desire to scratch becomes so imperative that unless the patient is allowed to do so he suffers untold agony. He uses his finger nails, rough cloths, a brush or anything rough that happens to be most convenient, and in many, not to say most cases, this aggravates the original desire, renders the foci multiple and widens the extent of surface of the original one the itching becoming more rebellious and perhaps universal. It is noteworthy, however, that when the skin has become inflamed, excoriated and lacerated in places, the *pruritus* ceases, the pain resulting from the traumatism overshadowing as it were the pruritic disturbance and causes a genuine nervous relaxation. I wish here to call special attention to this fact as bearing appreciably on the treatment in cases which seem to resist all indicated lines. The nights are the most troublesome, inasmuch as the patient is free from clothing and has easy access to all parts of his body and can scratch and tear himself, literally, to pieces.



The integument, as was prefaced, shows no lesions except those as the result of scratching and, remarkable to say, even in cases where the scratching has been particularly violent, evidences of traumatism are very often at a minimum, almost imperceptible and always out of proportion to the violence of the scratching.

In many cases the skin is dry and rough; sometimes it becomes thickened, indurated, pigmented and develops a pseudo-lichen or lichenoid eruption, the hypertrophied papillæ being the natural result of a constant scratching.

A decided case of pruritus, then, is a serious disease resulting in loss of flesh, insomnia and neurasthenia, a premonitory perhaps to insanity and suicide.

It is the poor, unfortunate, nervous arthritic, the son of a long generation of rheumatic and gouty ancestors who is the most prone and furnishes us with most cases. Now, let us briefly summarize eight of the principal varieties of pruritus which are divided into two main groups, general and local pruritus.

*General pruritus* is itself subdivided into 1st. Pruritus hiemalis; 2d. Pruritus senilis; 3d. Pruritus generalis to which belongs particularly the pruritus of jaundice and Bright's disease.

*Localized pruritus* is divided into 1st. Pruritus of the anus; 2d. Pruritus of the vulva; 3d. Pruritus of the scrotum; 4th. Pruritus of the nose; 5th. Pruritus of the palms and soles; the last two varieties being very rare.

Pruritus hiemalis, or "Winter Itch" is the most common seasonal itch and was especially studied and described by Duhring who believed it to be a distinct affection. The disease occurs most frequently between the months of October and January and disappears spontaneously with the onset of warmer weather. The disease has in a way certain characteristics of its own in that it occurs principally on the extensor surfaces of the body and attacks dry xerodermatous skins, which condition is itself always worse in winter, from the effect of the cold and reduced activity of the fat and sweat glands. It is in this variety of pruritus that we most frequently meet with secondary skin eruptions, lichenoid and eczematous in character, due to the scratching. The itching is worse when the patient goes to bed or rises, in other words, when the body is exposed to the effects of the temperature; the patient

having rest during the day when his body is warmly clad and his attention diverted and his mind occupied.

Pruritus senilis is without doubt the worst form that comes under our observation. It usually begins in the sixties and continues almost incessantly as long as the victim lasts. Medication here seems of no avail, except to give the patient momentary relief, most treatments acting well for a while, then it fails and another line must be tried.

In direct contrast with pruritus hiemalis, this type rarely shows any lesions, secondary or otherwise on the skin; even after prolonged scratching the skin remains unhurt with only a slight increase in pigment deposit.

Pruritus generalis as described by Bulkley very often begins in winter and in so far resembles pruritus hiemalis. This type, however, continues through all the seasons with remissions and exacerbations, irrespective of all changes in season or of temperature and is more distinctly the hereditary type, if any exists. The presence of bile products in blood, albuminuria, diabetes, even tuberculosis and gastric cancer are held as causative factors responsible for this type; in women, pelvic disorders are usually the responsible causes. Of the local varieties, pruritus of the anus, vulva and scrotum are the most common and can be considered under one head, as they have many causes and clinical features in common. In these localities are so frequently seen eczemas and skin eruptions of parasitic nature that great care must be taken in making a correct diagnosis and the parts must be examined very closely before a diagnosis of simple pruritus is made. The presence of worms, fissures, hemorrhoids; of leucorrheal discharges; diseases of the uterus, and even the menopause, are the most common factors responsible for pruritus ani and vulvæ respectively. At these sites the constant scratching very often renders the skin particularly soft, velvety and glazed in appearance, resembling very much an onion peel. I need not add that these three types make the individuals suffering from them most unhappy, causing them to scratch at times and in places most inappropriate.

Pruritis of the nose, or better of the wings of the nose, soles of the feet and palms of the hands most of us have observed. Pruritus of the nose is common in many asthmatics. I have seen recently two cases where the itching was a precursor of an attack of asthma.

## TREATMENT.

The successful treatment of pruritus resolves itself into the recognition of the causes of the itching and their removal, if possible; a thorough knowledge of the etiology is therefore essential. As a matter of routine, when a patient complains of general pruritis, the first thing to do is to exclude all possible parasitic irritation; nine times out of ten, so many say, the parasite is the pediculus in elderly persons or the acarus of scabies at any age. The location and outline of the scratch marks will help considerably in deciding the nature of parasite; if they are about the shoulders there is a strong presumption in favor of pediculosis of the body; if about the hands and wrists of scabies. In both instances the lesions in evidence are determinative.

The next most common cause is urticaria. If the case does not present the characteristic lesions at the time of the examination, a little questioning brings out the fact that the patient "breaks out in bumps" and a little friction of the skin will bring out the characteristic chirographic symptom. Having excluded these three principal affections, disorders of liver, digestive tract and kidneys must be successively investigated; the urine being examined in all cases for bile, albumen, sugar and excessive quantities of uric acid and few cases will remain not referable to one or the other of these systems. If the patient is advanced in years and every other cause of itching has been excluded, the diagnosis of pruritus senilis remains.

In local pruritus the parts must be carefully examined to exclude any objective source of irritation already mentioned and the various causes enumerated in its etiology reviewed until the right one is found. From what has been said it will appear that a great mass of the treatment has been already gone over so that we shall now consider only the so-called specific or directly anti-pruritic medication.

Of the remedies given internally the one we have found the most generally satisfactory is cannabis indica. In using this drug care must be taken to procure a thoroughly reliable make and one of uniform tested strength and continue using the same throughout the treatment. The normal liquid made by Parke, Davis & Co. I prefer.

The initial dose should be small, 5 drops three times a day, well

diluted and given after eating and increased gradually until 20 or 30 drops are taken at a dose. Next of the same order are the preparations of camphor (the mono-bromate, preferably), valerian, musk and castoreum, given separately or combined in pill form in full doses, act well.

The valerianate of atropin hypodermatically given, and cautiously, in 1-200 grain doses, very often relieves most obstinate cases for a considerable period of time.

The French school seems recently to have become partial to the use of guaco in a certain class of cases and use it both locally and internally. Internally a pill is given, consisting of the aqueous extract of guaco, 2 grains, and sodium bicarbonate one grain, before each meal, to be increased to two or three pills three times a day. The drug must not be used when the skin has a tendency to eczema or is inflamed and irritated. Arsenic in some form has a great many advocates; it acts as an alterative, general tonic, improving the tone of the patient. Chloretone in 5 grain doses every 3 hours, often gives the patient a good night's rest and helps to maintain the anti-pruritic effect of the local applications.

Carbolic acid is another remedy which finds its place here, acting to Hebra; and is given in pill form combined with extract of valerian and decarbonated magnesia in dose of from one to two grains three times a day, after meals.

Du Castel has obtained excellent results in cases of pruritus originating from gastro-intestinal causes and even in the vulvar and senile type from lactic acid in doses of from one to two grammes of a 1 to 1-100 solution.

#### LOCAL TREATMENT.

The remedies recommended are extremely numerous. I shall only dwell upon those that have given good results in our hands and those particularly well recommended.

They are divided into two groups: 1st. Lotions. 2nd. Salves and applications or appliances which exclude air and prevent easy access to the parts.

Butte highly recommends the guaco as follows:

Guaco (crushed) .....30 grams.

Sodium bicarbonate.. 5 grams.

Water .....1000 grams.



Mix and boil for 15 minutes, allow to macerate for one hour and filter. This fluid must be applied warm as a lotion and, when possible, applied as compresses to the parts.

Other remedies used are: Carbolic acid from  $\frac{1}{4}$  to 1% freely applied; tumenol from 5 to 10%; tr. camphor in four parts of hot water; lotions of salicylic acid in alcohol or ether; applications of pure glycerin or glycerin with chloral hydrate and cherry laurel water.

Infusions of tobacco, 4 large leaves to the quart of water, applied cautiously if the skin is broken, often gives excellent results.

Duhring often combines the liquor potassæ with carbolic acid in the proportion of one part of potash to two of the acid in the quart of water. The liquor carbonis detergens, a favorite with the English school, in the proportion of 2 drachms to the quart of water, is well worth trying.

The full bath properly belongs here and is a very servicable adjunct to the internal treatment. The bath, depending upon the gravity of the case, the strength of the patient and his willingness to submit to same, may last from twenty minutes to several hours. The longer the soaking process the better and more lasting the effect. The bath must be warm and can be varied almost without limit and can be made either emollient, alkaline or acid.

For the emollient bath from two to four pounds of bran, one to two of starch, one to three of gelatin or of flaxseed or marshmallow root two to three pounds, to the bath of thirty gallons of water may be used.

The bath may be made alkaline with two to ten ounces of bicarbonate of soda, two to six ounces of carbonate of potash or about 3 ounces of borax to the same quantity of water.

Lastly acid baths may be used when no excoriations of the skin are present and nitric or hydrochloric or a mixture of both  $\frac{3}{4}$  i to the 30 gallons may be used.

When the pruritus is localized an application of equal parts of carbolic acid, menthol, camphor and chloral is very efficient. This combination forms an oily liquid, which Dr. Dyer discovered accidentally on mixing them. The mixture must be used pure and in that way causes very little irritation; if diluted with ether, oil or alcohol, it may be broken up and may prove disastrous in its appli-

cation. The application of plasters here find their place but not so much depends upon the medicament used as the fact that air is excluded and friction lessened. The plaster is put on and a tight bandage and where the itching area is appropriately located for such the support empties the engorged veins and dilated capillaries, overcoming thereby the beginning of a paroxysm of itching.

Scarification and the actual cautery are of great value in some obstinate cases. Limited areas can be repeatedly scarified or cauterized superficially with decidedly good results. Cold douches, rectal or vaginal, often give much temporary relief.

Seeligman, during the past ten years, has isolated a diplococcus in all of his cases of pruritus vulvæ and found that a 10% guaiacol in vasogen applied with a pledget of cotton each night succeeded in curing many primary, as well as secondary cases of this type.

Seibong of Barmen, has been successful in treating cases of pruritus vulvæ et ani by local subcutaneous injections of 300 c. c. of very weak solutions of cocain and carbolic acid. It is not so much the drug used that gives relief as it is the mechanical presence of the quantity of fluid which distends the parts, stretches the nerves and brings on anesthesia.

Veratrin is recommended by Luland in localized and climacteric pruritus. He applies it locally in strength of 15 centigrams to the ounce and gives it internally in doses of 1-30 of a centigram three times a day. Acting upon the principle that pruritus senilis is often due to intestinal auto-intoxication it is recommended in such cases to keep the intestinal tract clean by purgatives; place the patient upon a milk diet and administer the so-called intestinal antiseptics and preferably the benzo-naphtol in doses of 12 grams daily. It seems to me I could go on indefinitely finding suggestions here and there for the treatment of pruritus; their number is legion and only shows the treatment of pruritus to be very unsatisfactory and in a few cases practically hopeless. With electricity, however, we still have some hope for the relief of the most obstinate cases. All the various currents are used and give more or less satisfactory results. The sinusoidal current is the one claimed by the French authors on the subject to do most good and has unquestionably many features in its favor. My experience has been limited to the galvanic current,

which I have used with good results, in a few obstinate cases of localized pruritus. In my experience the intensity of the current used was of importance. The medium currents did not give much relief and it was not until I had applied the current with as much intensity as the patient would or could stand that the result was in any way permanent. In one case in which the pruritus extended from the middle of the hand to the elbow, or the extensor surface, the current was applied every day in a strength almost sufficient to blister and to produce in the course of ten days a thickening of the skin with keratosis. This heroic application was resorted to as a last means because the patient's condition was such that something had to be done to give relief; she was almost exhausted from insomnia and in a nervous state, bordering insanity. The result was gratifying; the case ultimately recovered. I shall not here theorize on its mode of action, but believe in a general way that electricity has, perhaps, a selective influence over the pruritic sense, if such a sense exists as claimed by Bronson and the French school. Or it may be the local structural changes in the nerve ends and secondary tissues (causes of the pruritus) are made so much worse by the intense electric currents as to ultimately cause their atrophy and destroy their pruritic sense. This line of treatment naturally only applies to localized pruritus. In general pruritus the currents cannot be used in any such strength and in such cases the electric bath with the sinusoidal current is the one worth trying—as suggested by Oudin and Bisserie.

## Society Proceedings.

---

### Orleans Parish Medical Society.

---

*President*, DR. M. J. MAGRUDER.

*Secretary*, DR. S. M. D. CLARK,

163 University Place, New Orleans.

In charge of the Publication Committee, DR. S. M. D. CLARK, *Chairman*,  
DRS. E. J. HUHNER and M. M. LOWE.

---

MEETING JULY 23, 1904.

(CONTINUED FROM OCTOBER JOURNAL.)

DR. A. C. EUSTIS read a paper entitled:

**"A Preliminary Note upon a New Clinical Method as an Aid  
in Diagnosing Renal Impairment, Based on the  
Nitrogen Content of the Blood."**

INTRODUCTION.—There is no class of patients which is as universally brought to the notice of both the physician and surgeon as those suffering from renal lesions. Credit is almost unanimously given to Richard Bright, who published his "Report of Cases in 1827, for first having drawn attention to disease of the kidneys as a cause of dropsy, coma and other manifestations of the condition. According to Elliott (1), however, as early as 1577 van Helmot regarded the kidneys as concerned in the causation of dropsy, while in 1770 Cotunnus discovered that the urine of certain dropsical patients was coagulable by heat. This fact was observed, additionally, by Blackall in 1813, 14 years before the appearance of Bright's paper. Blackall did not fully appreciate, however, the pathology of the condition; for he considered that the albumin in the the urine was caused by the kidneys endeavoring to excrete the dropsical fluid. There is no doubt that Bright is the first man to fully appreciate the true condition, and, besides, calling attention to coma, blindness and apoplexy as manifestations of diseased kidneys, he pointed out that there was usually a diminution in the excretion of urea.

Until Johnson, in 1852, brought out the fact that there were three distinct forms of nephritis, it was generally considered that



the various pathological conditions found in the kidneys at autopsy were various gradations of the same process of disease; and, that the "large white kidney" in time would contract and result in the "small contracted kidney." He was ably supported by Traube, Todds, Wiks, Stewart, Quain and Virchow.

Virchow, in his "Cellular Pathology," divided Bright's disease into three classes, viz.: 1st. Lesions originating in the tubules; 2nd. Lesions originating in the vessels, in which he included amyloid kidney, and, 3d. Lesions originating in the connective tissues.

The controversy between the unicists and the pleuralists has gone on to this day; and, while we know that, clinically, there is no doubt of the existence of three distinct forms of nephritis, that pathologically, we seldom see a type of any one form, pure and simple. There is always more or less hyperplasia of the connective tissue in chronic parenchymatous nephritis, and in chronic interstitial nephritis there is always more or less degeneration of the tubules. The point to be noted as bearing on the subject of this paper, is that the symptoms complex, which we at present call uremia, are common to all forms of nephritis. Hence I shall not dwell upon the differential diagnosis of the various forms of nephritis, nor upon their respective symptoms.

ETIOLOGY.—In order to understand the several clinical methods at our disposal, to aid us in arriving at a proper diagnosis of obscure renal conditions, it is necessary to consider the various theories as to the etiology of nephritis and of uremia. It is generally accepted that nephritis, in its various forms, is caused by the constant action upon the kidney tissue of certain toxic substances of metabolic, chemical or bacterial origin. These substances are normally excreted by the healthy kidneys, but in time they damage the structure of these organs and there is a lack of function on their part, with subsequent increase in the blood and tissues of the katabolic products of tissue metabolism. These substances accumulating in ever-increasing amounts, finally cause the condition known as uremia. Which particular product causes the symptoms is not positively known as yet, nor do we know how it acts. E. G. Croftan (18) claims to have produced uremia by injections into animals of solution of xanthin.

According to the theory of Brown-Séquard, the kidneys pos-

sess an internal secretion which presides over tissue metabolism, and, that in order to have symptoms of uremia, it is necessary that there shall be an excess of this secretion in addition to a suppression of the renal functions. He based this theory upon the well known fact that in renal calculus there is often complete suppression of urine without any symptoms of uremia. F. W. Burton-Brown (2), Ascoli, Lindermann, Nefédieff, J. Rose Bradford (3), Pearch (17) and Meyer (6), have done considerable experimental work on the subject and the sum of their experiments can be expressed by stating that if an animal is injected with repeated doses of an emulsion of kidney, it will develop a serum which, when injected into other animals, will produce albuminuria and death from uremia in from three to four days. Bradford (3) further showed that the serum from this second animal, suffering with albuminuria, would produce uremia in a third animal. We see here, plainly, the effects of some nephrolysin; and Burton-Brown, to substantiate this claim, injected, subcutaneously, the serum from a human being suffering from uremia, and he was able to produce an experimental nephritis in two dogs thus treated.

Pearch (17) found that the serum of a dog, whose renal arteries or ureters had been ligated, failed to produce nephritis or changes in the kidneys or nephritic symptoms when injected into another animal. However, he found, as Bradford and others, that an emulsion of kidney, freed of blood, would cause nephritis when injected into animals.

It is thus evident, that uremia is not produced by a mere suppression of the renal function, but that it is due to the preponderance in the blood of some specific toxic substance, apparently originating in the kidneys. That it is not urea, is proved by the fact that this substance, when injected into animals, is comparatively innocuous.

The manner in which the poison acts is a much-mooted question. Traube and others claim that the toxin produces great constriction of the arterioles over the entire body, but that the arterioles of the kidneys and of the brain are primarily affected. This constriction of the arterioles of the brain, causes an anemia of that organ, and the symptoms of the uremia will depend upon the portions of the brain involved, i. e., whether there will be convulsions or coma. Smith (19) claims that just such a condition exists in

eclampsia, but that the corpora striata is the portion especially concerned in the anemia. In uremia, however, there is a great increase in tissue metabolism, with corresponding increase in the nitrogenous katabolic products; while in eclampsia this does not obtain.

Whatever may be the true cause of uremia, whether by the action of nephrolysins or, as pointed out by Traube, from anemia of the brain, or from mechanical means, we know that there is an increase in the blood and tissues of the katabolic products of tissue metabolism. These substances, besides carbon dioxide and water, are principally urea, uric acid, xanthin, hypoxanthin, guanin, adenin, creatinin and ammonia. All of these substances contain large amounts of nitrogen; and it is self-evident that when these substances are retained in the blood, there must necessarily be an increase in the nitrogen content as well as an increase in the molecular concentration of that fluid. Herter (4) had this point in mind when he advised the examination of the blood for the content of urea as a means of diagnosing doubtful cases of uremia. A criticism of this method will be made later.

Strauss (5) concluded, from observations on a great number of various forms of nephritis and on the normal individual, that there is a great increase of the nitrogen content of the blood in cases of uremia, especially those suffering from uremia caused by a chronic interstitial nephritis. He found in the normal blood that the content of nitrogen for every 100 *c. c.* of blood was from 20 milligrams to 35 milligrams. In chronic parenchymatous nephritis, without symptoms of uremia, that there was an increase to 40 *mg.* of nitrogen per 100 *c. c.* of the blood, but that when uremia set in there was an increase to 65 *mg.* of nitrogen. In cases of chronic interstitial nephritis, he found a nitrogen content of 85 *mg.* of nitrogen, but when symptoms of uremia were pronounced there was an increase to 129 *mg.* per 100 *c. c.* of blood. The low content of nitrogen in chronic parenchymatous nephritis as compared with that in chronic interstitial nephritis can be accounted for by the fact that in the former disease there is usually associated dropsy, with consequent greater dilution of the body fluids. In uremia, further, he found the nitrogen as uric acid was increased from 0.6 of a milligram, the normal, to 2.9 *mg.* per 100 *c. c.* of blood. This probably accounts for the diminished alkalinity of



the blood in uremia, observed by McLachlan (7), Dare and others. Of the total nitrogenous content of the blood, according to Strauss, 75% exist as urea, 2.5% as uric acid, 5.0% as ammonia, and 17.5% in other forms. When uremia sets in there is a great increase in all of the nitrogenous constituents, but especially so of uric acid. He found no change in the content of chlorides, nor did he observe any increase in the percentage of total ash. This is important to be noted as bearing out the theory as to cryoscopy, *i. e.*, that the lowered freezing point of the blood is due to an increase especially of the soluble organic constituents of the blood.

Archard and Paiseau (8), Gréhan (9) and Herter and Wake-man (10), have observed, experimentally, that there is an increase in the content of urea in the blood of dogs, after double nephrectomy or after ligating both the ureters. This increase is at first rapid, but in from 36 to 48 hours there is a rapid decrease in the content of urea.

**PRESENT METHODS.**—Herter's method for the determination of urea in the blood, and which was followed by Archard and Paiseau, consists in extracting the blood with absolute alcohol, evaporating the alcoholic extract to dryness, and decomposing the residue with sodium hypobromite. The urea is calculated from the nitrogen evolved. This method, which is at present the shortest, requires at least six hours continuous work, is by no means accurate, and is not applicable to the resources of the busy practitioner. Furthermore, it requires at least 50 c. c. of blood for any degree of accuracy.

The usual method for the determination of the total nitrogen content of the blood is the Kjeldahl method, which consists in decomposing 10 grms of blood with concentrated sulphuric acid and distilling off the nitrogen, as ammonia, into standard acid, after neutralization by sodium hydroxide. This method, likewise, while accurate, is not suited to the needs or to the facilities of the practitioner, and takes even longer than the former method.

Before considering a new method which I have devised for the determination of the total nitrogen in the blood, and which I think is adaptable to ordinary clinical needs, it may not be amiss to say a few words in regard to cryoscopy of the blood as a means of diagnosing renal insufficiency; so that you will be in a



position to compare the two methods. The cryoscopic examination of the blood and urine, which is being used quite extensively at present in the North and in Germany, was discovered by Rault in 1882, but it was first applied in medicine by Koranyi (11) in 1898. Kummel (12) in Germany was the first to do any extensive clinical work with the cryoscope and he has reported observations on some 300 or 400 cases of various forms of renal lesions, while Tinker (11) has done considerable work on the subject in this country.

For the benefit of those who are not acquainted with the technique of the method, it may be well to explain just what is cryoscopy, and what we may expect from it. It depends upon the fact that the greater the molecular concentration of a solution the lower will be its freezing point; and, vice versa, the lower the freezing point of a aqueous solution the greater is its molecular concentration. This is determined by a special instrument called a cryoscope, but time will not permit me to describe its mechanism.

Kummel, assisted by Rumpel (12), has ascertained that the freezing point of the blood of a normal healthy individual is  $-0.56^{\circ}$  C., while the freezing point of the blood in cases of renal impairment is lower, going as far as  $-0.71^{\circ}$  C., in some cases of uremia, due to the retention of katabolic products and resultant increase of molecular concentration. The freezing point of the normal urine they ascertained to be  $-.9^{\circ}$  C., while, if there is impaired renal function the freezing point of the urine rises. In some cases of chronic interstitial nephritis they found the freezing point of the urine to be  $-0.2^{\circ}$  C., very close to that of distilled water. Results by this method, especially where a unilateral kidney lesion exists, and it is doubtful if the other kidney is functioning sufficiently, have been very satisfactory, according to most of the cases reported. However, we can readily understand that different diets will markedly affect the freezing point of both the urine and blood, especially depending upon the albuminoid constituents of the food and the amount of water ingested. This is borne out by several writers, amongst others F. Poly (13), who found that the molecular concentration, as observed with the cryoscope, was normal in three cases of severe uremia; while in two cases in which molecular concentration was extremely high there

were no symptoms of uremia. Bevan (14) at the last meeting of the American Surgical Association, in St. Louis, stated that he had given the method a severe trial and he was forced to the conclusion that the freezing point of the urine was of very little clinical value, but that he considered the freezing point of the blood of the greatest importance.

I will simply mention some of the other clinical methods which we have at our disposal to aid us in arriving at a proper diagnosis of obscure renal lesions, viz., the determination of the toxicity of the urine and of the blood, the determination of the alkalinity of the blood, and the determination of the coagulation time of the blood.

With all these methods, we are still often puzzled in making a diagnosis of uremia, and, as Lambert (15) stated in his address as Chairman of the Section on Medicine at the last meeting of the American Medical Association at Atlantic City, we are often struck by the inaccuracy of the urinary findings, and we often find uremia developing where we least expect it. He urged further research work towards assisting in clearing up the chaotic condition of our present knowledge as to uremia and eclampsia, and it is with a view towards that end that I wish to submit this preliminary report on my work upon the subject, which has extended over a period of 12 months, but, I am sorry to say, with many forced interruptions.

I was well aware that when an organic substance was decomposed with sulphuric acid, that the nitrogen was converted into ammonium sulphate, as happens in the Kjeldahl method. However, this consumes considerable time, and I have taken advantage of the fact that when potassium permanganate is added, this reaction is hastened greatly. On the other hand when Nessler's solution, which is an alkaline solution of potassium-mercuric iodide, is added to a solution containing an ammonium salt, a yellow color is produced in the solution, ranging to a deep orange color, depending upon the amount of the ammonium salt present. This latter reaction is extremely accurate and is sensitive to the one-millionth part of ammonia in a solution. I have taken advantage of these facts in devising my method for the determination of the total nitrogen in the blood, my object being to use as small a quantity

of blood as possible, with reasonable accuracy, and in the shortest possible time.

My method at present, which I may modify in the future to make it even more simple, is as follows:

Twenty cubic millimeters of the blood are sucked up after pricking the ear in the ordinary Gower hemoglobinometer pipette, and transferred to a test tube preferably one 6 inches long. The pipette is washed out with distilled water into the same test tube, and one c. C. of concentrated sulphuric acid is added. I have facilitated this, by constructing a pipette with a bulb blown into its centre beyond the 20 cubic millimeter mark, so that the blood can be laked with the water directly in the pipette, and, after washing out the pipette the same pipette can be utilized for measuring out the sulphuric acid. In this manner there is no chance that any error will occur during the manipulation. After the addition of the sulphuric acid, the mixture is boiled and small crystals of potassium permanganate are added, from time to time, until the black color, caused by the charring of the sulphuric acid, has entirely disappeared. A water white solution is thus obtained in a few minutes. It is necessary to boil the contents of the test tube after each addition of potassium permanganate. After cooling, the acid solution is diluted to 100 c. c. in a Nessler jar and 2 c. c. of Nessler's solution are added. A yellow color is produced, varying in intensity with the amount of ammonium sulphate present. By comparing the color obtained with the color produced by known amounts of a standard ammonium chloride solution, after the addition of the same amount of Nessler's solution of nitrogen in the 20 c. m. of blood can be ascertained.

The standard ammonium chloride solution used, is made by dissolving 0.314 grams of C. P. ammonium chloride in one hundred cubic centimeters of water. This solution is the stock solution and it must be diluted before being used. Five cubic centimeters are diluted with distilled water sufficiently to make five hundred cubic centimeters. Each c. c. of this latter solution contains exactly 0.01 mg. of ammonia or 0.008 mg. of nitrogen. By multiplying the number of cubic centimeters of standard ammonia solution, required to produce the same color as obtained with the blood, by 0.008, and this result by 5000, we obtain the milligrams of nitrogen in 100 c. c. of blood. Instead of perform-



ing this double multiplication, it is indential if we multiply by forty (40). This number is my constant factor.

It is possible that some will criticize this portion of the method on the grounds that we are dealing with an acid solution, while the ordinary Nesslerizing, as conducted in water analysis, is conducted on an alkaline or neutral solution. I have found that the addition of one *c. c.* of sulphuric acid to standard ammonium chloride solution does not alter the color produced by the Nessler's solution, but rather hastens the permanent color. I would state that comparisons of the colors should not be made until the solutions have stood for 20 minutes. Thirty minutes in all are required for the entire operation, after collecting the blood, provided the solutions are at hand. Duplicates and triplicates of the same blood have given uniform results, and I am certain that the method is considerably more accurate than most of our present clinical methods.

Examinations of the blood of 18 normal and healthy individuals have given me a reading of from 40 milligrams to 80 milligrams of nitrogen per 100 cubic centimeters of blood, and usually they were below 40 milligrams. Variations in color of less than 1 *c. c.* were not noted, and I took 40 *mg.* as my normal, but on reading Strauss' results I realize that I should have gone lower. However, as we can have 40 *mg.* with no ill effects this may not be necessary. These results are only slightly higher than those of Strauss (5), who made observations on the nitrogen content of the blood of several hundred normal individuals, and I have consequently not felt called upon to make as many observations upon the normal individual as I otherwise would have done.

In all cases of nephritis I have obtained a high content of nitrogen in the blood, while, in those cases in which there was no renal impairment, the nitrogen content has been low. As will be noted from three of these cases cited below, the diagnosis was made from the blood finding alone.

It will be interesting to consider some of the cases more fully than is done in the table.

### CASES.

CASE 3. A young colored woman about 24 years of age was in my ward at the hospital for several days in a semi-delirious condition, heart normal and urinary findings negative, other than a



slight diminution in the excretion of urea. There were no symptoms of a cerebral lesion, but she presented slight edema of the lungs, without dyspnea, temperature normal, however. We were unable to make a diagnosis of the condition and were beginning to think that she was a case of insanity. As a routine practice, I examined her blood for the nitrogen content, and on finding 200 milligrams of nitrogen to the 100 c. c. of blood, we immediately stimulated elimination, with complete recovery. I have been unable to this day to make a positive diagnosis of this case, as she deserted shortly after being allowed to sit up, but that there was some renal impairment I am fully convinced, and this conviction is based upon the high nitrogen content in the blood.

CASE 7. Colored female, 45 years of age, was admitted to ward 40 on August 18, 1903, in a comatose condition and with her breath smelling strongly of alcohol. Her face had a decidedly edematous appearance and there was 5% of moist albumin in the urine, with a diminution in the percentage of urea. Her pulse was of high tension and moderately rapid. A diagnosis had been made in the amphitheater of acute alcoholism, but fearing that possibly there may be a uremic condition also, I examined her blood. Eighty milligrams of nitrogen per 100 c. c. of blood were obtained, which confirmed the diagnosis of acute alcoholism. She left the hospital the following day, with only the effects of her debauch.

CASE 8. From the obstetrical ward of the hospital, and observed through the courtesy of Dr. Stafford and Dr. Gamble, was a colored female 22 years of age, a primipara, admitted February 10, 1904, was suffering with severe eclampsia, the duration of which is not known. Her urine examination showed 10% of moist albumin, granular casts, urea determination not made. She was delivered with forceps by Dr. Stafford and I obtained her blood a few hours afterward, while she was still in convulsions. Only 40 milligrams of nitrogen was found per 100 c. c. blood. She was sweated freely and elimination stimulated, but death resulted. Unfortunately a post-mortem examination could not be made.

CASE 11. Colored female, 35 years of age, was admitted to ward 40 in a comatose condition; pulse very weak, temperature 100° F. She gave a history of having been treated for typhoid fever before admittance, but she had lain in coma for several days before ad-

TABLE OF CASES.

URINE										REMARKS
Case number.	DIAGNOSIS.	Milligramms of nitrogen per 100 cubic centime- ters of blood.	Total number of cubic centimeters passed in 24 hours.	Specific gravity at 60° Fahr.	Gramms of urea pass- ed in 24 hours.	Percentage of moist albumin.	Renal casts.	Reaction	Temperature of pa- tient. Expressed as degrees Fahr.	
1	Phthisis pulmonalis.....	120	.....	1020	.....	0.00	None	Acid	103.5°	Content of Nitrogen in the Normal blood, on eighteen in- dividuals, is 40 milligramms or less per 100 c. c. of blood. Dis- turbed metabolism may cause a rise to 80 milligramms with- out denoting renal impairment.
2	Typhoid fever.....	80	.....	1018	.....	1.0	None	Acid	100.0°	
3	Uremia? Dementia.....	200	.....	1017	1.5%	None	None	Acid	99.6°	
4	Chronic interstitial ne- phritis.....	120	.....	1007	15.°gm	1.0 %	Hyaline	Acid	98.6°	Patient in 3rd stage of disease. In fourth week of disease. Voided in bed and amount not measured. Edema of lower extremities.
5	Phthisis pulmonalis.....	80	.....	1020	.....	None	None	Acid	99.0°	Patient also had hemiplegia, (old).
6	Cerebral embolus.....	80	1200 cc	1014	30.°gm	3.0 %	Hyaline&Gran.	Acid	99.5°	
7	Alcoholic coma.....	80	.....	1005	0.8 %	5.0 %	Hyaline	Acid	98.5°	Aphasia and hemiplegia. 2.5 % Urea.
8	Puerperal eclampsia.....	40	.....	.....	.....	10.0 %	Granular	Acid	.....	Face oedematous.
9	Typhoid fever.....	120	1800 cc	1024	36.°gm	2.0 %	None	Acid	104.6°	Patient died. No autopsy held. High content of N. due to tem- perature.
10	Chronic diffuse nephri- tis. Uremia.....	200	900? cc	1009	14.°	1.0 %	Hyaline&Gran.	Acid	99.8°	Patient semi-comatose. Re- covery.
11	Uremia.....	200	.....	.....	2.1 %	7.0 %	Hyaline&Gran.	Acid	100.0°	Not confirmed by autopsy.
12	Cholilithiasis.....	40	.....	.....	.....	.....	.....	.....	.....	Patient jaundiced. Chr. En- docarditis.
13	Acute constipation.....	40	.....	.....	.....	.....	.....	.....	.....	Autopsy—Chr. Interstitial Ne- phritis.
14	Uremia.....	200	.....	.....	.....	12.0 %	.....	.....	99.0°	

15	Cerebral hemorrhage.....	120	.....	1012	1.2%	6. %	Hyaline&Gran.	Acid	102.0°	Diagnosis made from blood examination.
16	Uremia .....	200	.....	1014	1.8%	3.0 %	Hyaline, granular & waxy	Acid	101.0°	Autopsy—Amyloid kidney with swollen cortical portion. Organ congested.
17	Chronic endocarditis .....	80	2600 cc	1022	.....	Trace	None	Neutral	98.5°	No symptoms of toxemia.
18	Uremia .....	200	.....	1014	2.1%	$\frac{1}{4}$ %	Hyaline	F. Acid	100.0°	Autopsy—Acute capillary glomerulo-nephritis.
19	Cerebral gumma .....	120	.....	1011	1.6%	Trace	Hyaline	Acid	99.0°	Has improved on Pot. Iodide.
20	Chronic interstitial nephritis .....	120	.....	1014	1.4%	1.0 %	Hyaline & finely granular	Acid	.....	Associated chronic endocarditis.
21	Chronic interstitial nephritis .....	140	.....	1007	1.2%	None	Hyaline	Acid	98.6°	Has attacks of vertigo.
22	Epilepsy .....	140	.....	1016	.....	None	None	Alkaline	99.0°	Patient partially demented.
23	Blood of dog after ligating both renal arteries.	140	Scant.	1045	6.0%	10.0 %	Gran. epith., pus & blood	Strongly Acid	102.0°	Diarrhoea and vomiting, but no other symptoms of uremia.
24	Same before operation.....	80	Free	1024	3.0%	None	None	Acid	100.0°	Dog in perfect health.
25	Pleuritic fluid from tubercular pleurisy .....	40 (less)	Urine	normal.	.....	.....	.....	.....	100.2°	No symptoms of any cerebral disturbance.
26	Vomiting of pregnancy..	140	.....	1029	.....	$\frac{3}{4}$ %	Hyaline&Gran.	Acid	.....	Death, but no autopsy held.
27	Acute septic nephritis.....	140	750 cc	1020	13.5gm	10. %	Granular	Acid	100.0°	Symptoms of threatened uremia.
28	Same after vapor bath of 1 hour .....	100	do	do	do	do	do	do	do	Symptoms ameliorated.
29	Puerperal eclampsia.....	140	.....	1007	1.1%	$9\frac{1}{2}$ %	Hyaline	Acid	103.6°	Blood taken 36 hours after delivery. Patient recovered.
30	Tubercular kidney?.....	80	3600 cc	1005	18.0gm	None	None	Alkaline	100.0°	Definite diagnosis not made. Patient has cystitis and pyelitis.
31	Same as Nos. 26 & 27, after 3 days' treatment....	40	3150 cc	1005	35 gms	Trace	None	Alkaline	98.6°	All cerebral symptoms have disappeared.

NOTE.—Since reading this paper I have found that the manganese sulphate formed while decomposing the blood with sulphuric acid and potassium permanganate gives a light yellow color with Nessler's solution. To obviate any error in reading I now employ standard solutions of potassium permanganate and of manganese sulphate of 5 per cent. and 7.07 per cent. respectively. One c. c. of the former will produce just as much manganese sulphate as is contained in the latter.



mission. The urine examination, which was obtained with a catheter, showed 7% of albumin, 2.1% of urea, hyaline and granular casts. She died a few hours after admittance, but no autopsy could be held, as the consent of the relatives could not be obtained. Her blood examination showed the nitrogen content to be 200 *mg.* per 100 *c. c.* of blood.

CASE 14. Colored female, 40 years of age, was admitted to ward 40, December 10, 1903, in a comatose condition. There was a history of sudden onset of the coma. Urine examination made at the time showed 12% of moist albumin; other contents not noted. Death resulted and the post-mortem examination held by Dr. Pothier showed a great diminution in the cortical portion of both kidneys, with firmly adherent capsules. Dr. Pothier made an anatomical diagnosis of chronic interstitial nephritis.

CASE 15.—Colored female, 48 years of age, a cook by occupation, was found in her kitchen in a comatose condition and conveyed to the hospital in the ambulance. Her pulse was 80 per minute and of high tension, temperature 102°, and urine examination showed 6% of moist albumin, with hyalin and granular casts. Urea determination was made, but not recorded; but I remember it was about 1.2%. There was no evidence of facial palsy and the diagnosis of uremia was made and treatment instituted accordingly. Examination of her blood showed 140 *mg.* of nitrogen to 100 *c. c.* of blood and this low content of nitrogen led to a more careful examination of the patient. Some slight paralysis was then noted on the right side, but not very marked and with no other symptoms of a cerebral hemorrhage. Treatment, however, for uremia, was discontinued and in 24 hours she had recovered completely from her coma, and presented complete right hemiplegia with aphasia. At no time were the ocular symptoms indicative of a cerebral hemorrhage, and a diagnosis was made entirely on the negative findings of the blood examination. I had observed previously, that in patients with elevated temperature, there was a slight increase of the nitrogen content of the blood, due no doubt to the increased tissue metabolism in this condition.

CASE 18.—L. H., colored female, 30 years of age, when first seen, June 15, 1904, was in a demented condition. There was no history obtainable other than that the condition had come on suddenly. She was very emaciated, but examination of the heart, lungs and



liver showed these organs apparently normal. A tumor about 3 inches in diameter could be felt in the right lumbar region, extending dorsally and apparently attached or continuous with the right kidney. The urine was scant, but as she voided in the bed, the quantity could not be measured for 24 hours. It showed a specific gravity of 1014; acid reaction,  $\frac{1}{4}\%$  albumin; 2.1 urea, pus, red blood corpuscles, hyaline casts and urates. She passed into a comatose condition in two days and died six days after I first saw her. The blood taken during coma showed 200 mg. of nitrogen per 100 c. c. of blood. A partial autopsy, only, was held. An incision was made over the right kidney and a large mass of tubercular glands was found surrounding the right kidney and part of the pancreas. There was no evidence of tubercular peritonitis, but the spleen and liver presented a few miliary tubercles. I am indebted to Dr. Weis for the following careful examination of a portion of the right kidney.

"The kidney showed on section, stained with hematoxylin and eosin, an infiltration of the cells which line the capillaries and the capillaries, themselves, filled with cells. The loops of the glomeruli showed the same condition, *i. e.*, an enormous increase of the cells within the glomerulus, with a corresponding increase in the number of the neuclei; so numerous, indeed, that the entire glomerulus appeared to be made up of simply a mass of nuclei. There is no hyperplasia nor multiplication of the cells of Bowman's capsule. There is some edema of the kidney, shown by an increase in the spaces between the tubules, with here and there the cut section of a blood vessel, not filled with blood, but more or less atrophied, and also a faint coagulated albuminous exudation between the tubules. In various places throughout the interstitial tissue there is more or less hemorrhage. There is some fatty degeneration and exfoliation of the cells lining the tubules.

"Diagnosis—subacute intercapillary glomerulo-nephritis."

CASE 27. L. H., white male, 37 years of age, when I first saw him, was suffering from an acute septic nephritis, as a result of a chronic prostatitis, cystitis and pyeletis. He presented all the symptoms of an impending uremia, such as headache, vertigo, high tension pulse, etc., and was referred to me by Dr. Matas for treatment of this condition. His urine, when first seen, contained 10% of moist albumin, pus, granular casts, epithelial casts, 1.8% of

urea, specific gravity 1015. The total amount passed for the 24 hours was not noted, as he had traveled several hundred miles and had voided his urine on the train. His temperature was 99.2° F., pulse 92 per minute and extremely high tension; respiration 18. His face was flushed and his eyes had a decided stare. Examination of the heart, lungs, liver and spleen showed these organs apparently normal. His blood, taken when in this condition, showed a nitrogen content of 140 *mg.* per 100 *c. c.* of blood. After free purgation and diuresis of 6 hours and a hot vapor bath of one hour's duration, this content of nitrogen had dropped to 100 *mg.* per 100 *c. c.*, while all the symptoms of uremia had greatly improved.

On the second day after first being seen he voided 750 *c. c.* of urine, of a specific gravity 1020, with 10% of albumin, pus, 13.5 grams of urea for 24 hours, acid reaction. This was the condition of the urine when the first and second sample of blood was taken. Temperature 100° F. When the third sample of blood was taken he was excreting 3150 *c. c.* of urine sp. gr. 1005; 35 grams. of urea in 24 hours; a few pus cells; no casts and only a bare trace of albumin. I will state that these albumin determinations were made on the filtered urine after addition of acetic acid. Examination of the blood at this time showed a content of nitrogen for 100 *c. c.* of blood of only 40 *mg.* of nitrogen.

From the citation of these cases and by reference to the results in the table, it will be seen that whenever the nitrogen content of 100 *c. c.* of blood is above 120 *mg.* there are some symptoms or signs of renal impairment. However, this amount is obtained in certain cases of elevated temperature, on account of the greatly increased tissue metabolism, and hence the readings, as with cryoscopy, must be made with this fact in mind.

It will also be noted that in the two cases of eclampsia which I have been fortunate enough to observe, the nitrogen content is comparatively low, and this has an important bearing on the treatment of this disease. My limited number of cases tend to support the almost universally accepted theory that this disease is due to some specific toxin and that it is not a true uremia. Zweifel (16), has recently determined the percentage of urea in these cases and he states that contrary to other cases of nephritis, examination of the blood of these cases for the content of urea is of no value.

In order to determine the effect of diet upon the nitrogen content of the blood, fearing that this may be a source of error, I placed myself upon a forced nitrogenous diet of eggs and rare meat for three days. Other than the dullness and headache experienced I found that there was very little effect. The blood before the nitrogenous diet showed a content of 80 *mg.* of nitrogen, while afterwards there was an increase to only 100 *mg.* per 100 *c. c.* blood. True, my kidneys were not damaged and we cannot take this as a true example of what would happen with a diseased kidney.

Furthermore, in order to determine whether or not this method could be used as a means of prognosis, an experiment was conducted upon a dog. Dr. Gessner and Dr. Lemann kindly ligated both renal arteries of a dog for me, and the effect of this operation upon the blood was noted. The blood was examined for four days prior to and for six days after the operation, it being procured from the shaven and cleansed ear in each instances.

The results were as follows, 20 *c. m.* of blood taken in each instance, and calculated to milligrams of nitrogen per 100 *c. c.* of blood.

3 days before ligating renal arteries.....	120 <i>mg.</i>
2 days before ligating renal arteries.....	100 <i>mg.</i>
1 day before ligating renal arteries.....	100 <i>mg.</i>
1 hour before ligating renal arteries.....	80 <i>mg.</i>
1 hour after ligating renal arteries.....	80 <i>mg.</i>
6 hours after ligating renal arteries.....	80 <i>mg.</i>
18 hours after ligating renal arteries.....	120 <i>mg.</i>
32 hours after ligating renal arteries.....	140 <i>mg.</i>
41 hours after ligating renal arteries.....	140 <i>mg.</i>
50 hours after ligating renal arteries.....	120 <i>mg.</i>
64 hours after ligating renal arteries.....	100 <i>mg.</i>
72 hours after ligating renal arteries.....	100 <i>mg.</i>
4 days after ligating renal arteries.....	100 <i>mg.</i>
5 days after ligating renal arteries.....	100 <i>mg.</i>
6 days after ligating renal arteries.....	80 <i>mg.</i>

It will be noted that there was no increase in the nitrogen content until 18 hours after the operation, which is a longer time than that observed by Archard and Paiseau (8). This can be explained, partly by the fact that the animal suffered from a severe

diarrhea and vomiting, as well as from a salivation and undoubtedly considerable nitrogenous excrementitious matter was thrown off from the system in these ways. Further, the dog would not eat and was consequently in a low state of vitality, with diminished tissue metabolism. The animal was kept alive by nutritive enemata of 10 grams of Witte's peptone to 100 c. c. of physiological salt solution, and the beneficial effects of such nutritive enemata are well illustrated by the effects upon this animal. For 36 hours after the operation there was complete suppression of urine, but after this the urine was voided in increasing amounts. Examination of the urine before the operation showed no abnormalities, but subsequent to the operation there was 10% of albumin, albumoses, epithelial, granular, pus and blood casts in the urine, with 6% of urea and a specific gravity of 1045.

The results of experimental work along the same line, conducted by Archard and Paiseau (8), Bradford (3) and others had been death of the animals in from 36 to 72 hours, death resulting, apparently, from asthenia. The fact that catgut was used in ligating the arteries on this dog accounts for its recovery, as this was evidently absorbed in 48 hours. The nitrogen content of the blood bears this out, as the maximum was reached in 32 hours after the operation, persisted until 50 hours and then decreased. A thrombus was evidently formed on the proximal side of the ligature, and when the latter was absorbed the thrombus was transformed into an embolus, with the resulting lesions in the kidneys, producing the changes in the urine. The dog was chloroformed to death two weeks after the operation and apparently after complete recovery, and evidences of an infarct was found in each kidney.

It will also be interesting to note, before closing, the high content of nitrogen obtained in the one case of vomiting of pregnancy, which was observed through the kindness of Dr. Barnett and Mr. Leckert. The fact that there was a nitrogen content of 140 mg. in 100 c. c. of blood led me to conclude that there were some renal involvement in this case, as her temperature was not elevated. Dr. Barnett has since informed me that the patient had died, but that no autopsy was held. I am indebted to Mr. Leckert for copies of the urine reports, which showed: Acid reaction, Sp. gr. 1016 to 1020; albumin  $\frac{1}{2}$  to  $\frac{3}{4}$ %, hyalin and granular casts, bile, leu-



cocytes, red blood cells, urates and bladder epithelial cells. The total quantity for 24 hours and the amount of urea was not noted.

While no conclusion can be drawn from the case, further observation upon the blood of these cases of vomiting of pregnancy may throw some light upon the etiology of this condition, which is so obscure at present. If the vomiting is caused, as I am led to believe, from the blood examination of this case, by a retention of toxic materials in the blood, our entire treatment of these cases will have to be altered. Perhaps more cases will be brought to full term by stimulating elimination. This one case opens up a wide field for future investigations, and I hope to hear of others who will give this hypothesis due thought and consideration, and which hypothesis I hope to prove in due course of time.

#### CONCLUSIONS.

I have not observed a sufficient number of cases, as yet, to draw very definite conclusions, and I have intended this paper only as a preliminary note, with a view to continuing my investigations on this subject. From the cases observed, however, I think I am justified in concluding, if diet and temperature are taken into consideration, 1st. That if the blood of a patient shows a nitrogenous content below .80 *mg.* of nitrogen per 100 *c. c.* of blood, the patient has no renal impairment.

2d. That if the blood shows a nitrogen content of from 120 *mg.* to 140 *mg.* per 100 *c. c.*, the patient is suffering from partial renal impairment.

3d. If the blood shows a nitrogen content of 200 *mg.* of nitrogen to 100 *c. c.* of blood, the patient is suffering from uremia.

The advantages of the method to the clinician can well be realized by carefully studying the cases cited in the table.

1st. Its advantages in doubtful cases of coma, such as cases 7 and 15, where the patient has renal lesions, but in addition shows symptoms of an alcoholic coma, or cerebral lesion, in assisting or even making a positive diagnosis possible.

2d. Its advantages over our present methods are the short time (30 minutes) which is required to perform this method, and also the small amount of blood required, as well as its simplicity.

Before closing it gives me pleasure to express my thanks to Prof. A. L. Metz for his valuable suggestions, and for his aid in conducting the investigations; to Prof. R. Matas, for the gen-

erous use of his library, and for his aid in securing the literature upon the subject; to the House Officers of the Charity Hospital for placing the wards of that institution at my disposal, which has facilitated the work considerably; and to Messrs. Wymer and Leckert, internes at the Charity Hospital, for histories of cases, and for courtesies shown me in their respective wards.

## BIBLIOGRAPHY.

1. A. R. Elliott, *Medical Standard*, Oct., 1903, p. 501.
2. F. W. Burton-Brown, *British Medical Journal*, 1903, Vol p. 195.
3. J. Rose Bradford, *Lancet*, July 4, 1903, p. 1.
4. Herter, Chemical Pathology, Lea Bros. & Co., Phila.
5. Strauss, *Die Chronischen nieren Entzündigen*, Berlin, 1902, and *Progressive Medicine*, Dec., 1903, p. 245.
6. Meyer, *Jahresbericht*, Virchow u. Hirsch, 1894, p. 187.
7. McLachlan, *Ibid*, p. 236.
8. Archart and Paiseau, *La Semaine Médicale*, July 9, 1904, p. 209 "La Rétention de l'urée dans l'Organisme Malade."
9. Gréhant, "Mesure de l'activité physiologique des reins par le dosage de l'urée dans le sang et dans l'urine," *Jour. de Physiol. et de Pathol. Gen.*, Jan., 1904.
10. Herter and Wakeman, *Journ. of Exper. Med.* 1899, p. 117.
11. Tinker, *John Hopkins Hosp. Bull.* No. 147, 1903, p. 163.
12. Kummel, "Proctetische Eifarungen ueber Diagnose und Therapie der nieren Krankheiten. *Arch. f. Klin. Chirurgie*, LXIV, p. 586.
13. Poly, *Deutsche Med. Wochenschrift*, XXX, No. 23 and abstract in *Journal A. M. A.*, July 9, 1904.
14. Bevan, *American Medicine*, July 23, 1904, p. 140.
15. Lambert, *Journal A. M. A.*, June 25, 1904, p. 1669.
16. Zweifel, *Archiv. f. Gynecologie*, Bd. LXXXII, 1904, abstracted in the *Amer. Jl. of the Med. Sci.*, Aug., 1904.
17. Pearch, *Medical Record*, June 6, 1903, p. 917.
18. Croftan, cited by Elliott in *Med. Standard*, Oct., 1903, p. 502.
19. A. L. Smith, *Annals of Gynecology and Pediatrics*, Jan., 1904, p. 18.

## DISCUSSION.

DR. ELLIOTT, JR., had seen cases in which he needed all the help that could be given him in determining the true condition of the eliminative process. He saw a great many cases in which hyalin casts with albumin meant nothing. He never made a diagnosis of uremia without first determining the urea from the 24 hours' urine. Has now a case in which there were granular and hyalin casts, with albumin, but the determination of urea in 24 hours showed that 430 grains were eliminated. He was very interested in the process suggested by Dr. Eustis and was anxious to become proficient in its employment. Eclampsia was not due to the kidneys, but to a certain toxin circulated in the blood. He had seen cases in which it was impossible to differentiate at the time between alcoholic and uremic coma, and it was in just such cases that the determination of the nitrogen content of the blood would be of value. The color index, he admitted, was a little difficult for a beginner, but as Dr. Eustis perfected a technic, probably this apparent difficulty would be overcome.

DR. HUME was glad to be able to testify to the value and worth of the method just presented by Dr. Eustis. He felt that after trying other methods aiming at the same purpose as that of Dr. Eustis, that the one under discussion was unquestionably, superior to any of the present day. He felt that Dr. Eustis was to be congratulated upon his excellent work.

DR. GEORGE S. BROWN said that he was one of the normal eighteen subjects reported in Dr. Eustis' paper, and he was convinced of the merits of Dr. Eustis' method. He was a little uncertain as to detecting the different shades of colors, and if one was not especially good in colors some trouble might arise. Ammonia free water should be used in making the test so as to insure uniformity. Any additional uremia would tend to deepen color effect.

DR. JACOBY asked what percentage of nitrogen did Dr. Eustis consider as a basis upon which to render an unfavorable prognosis in uremia and why did he take the two figures 120 and 140 as a basis for contraindication for operation upon the kidneys?

DR. STORCK asked Dr. Eustis if there was any relationship between the nitrogen content in the urine and in the blood; also if the amount of urea in the blood was increased after violent exercise?

DR. CLARK said that he was convinced that Dr. Eustis' method

was full of worth and believed it would prove a valuable aid to medical men in many trying cases in which it was so imperative to know the condition of the eliminative organs. The short space of time in which Dr. Eustis' method takes to give a definite opinion is important. It is impossible to obtain the same data in so short a space of time by any of our present known methods. It was just on this point, that of rapid results, that he thought the method was of greatest value. In determining the percentage of urea it was well recognized that unless the urine be taken from a 24-hour specimen it was worthless. Here was a method which would give the same data in 20 to 30 minutes that now takes 24 hours. The observations made upon eclampsia by Dr. Eustis went to corroborate the present views upon pathology of that disease, *i. e.*, it was not a uremia, but caused by some special toxic element in the blood other than nitrogenous. It was along these lines that Dr. Eustis' work especially interested him and would be watched with much interest. He was convinced that Dr. Eustis had an excellent thing and hoped to see it further developed.

DR. LEBEUF mentioned five cases of eclampsia seen during 19 years' experience in which he had not seen an evidence of a cast or of albumin, which went toward proving that the disease was not uremic, as heretofore believed.

DR. EUSTIS, in closing the discussion, said that he appreciated the kind consideration of his paper, which would go toward stimulating his future work. There was no doubt about albumin meaning nothing in certain cases, and he was convinced that the attitude taken by insurance companies on this point was not in keeping with the modern conception of the pathology of albumin in the urine. When associated with the teaching of physiological chemistry in the P. & S. of New York, he had occasion to make observations upon the presence of albuminuria among the students. Urine examined from the first section of students in the beginning of the year showed no albumin, but in the latter part of the session, when the students were in the midst of their examinations, 80% of the section showed albumin. In reference to the color obtained in his method, he did not agree with Dr. Elliott. Of course, it requires some little skill, but it was by no means a fine point, as thought by Drs. Brown and Elliott, and any who is able to make blood count can conduct an analysis by this method. Its



advantage over the cryoscope was evident. In reference to the quality of water used, mentioned by Dr. Brown, it would make no difference, provided the same water is used in both solutions; it simply being a comparison of colors. In assuming 120 and 140 as a basis upon which to caution upon operations of the kidney, he had been led to this arbitrary percentage by his observation upon cases with renal impairment. He did not say that we "shall not operate," but that it was dangerous to operate when the nitrogen content showed between 120 and 140, if the patient had only slight fever, believing that at this stage all Nature's power of elimination should be kept at work. He had not made any observations on cases after violent exercise, but would expect a slight rise, as exercise increases tissue katabolism. As the content of urea in the urine becomes less, the content of nitrogen in the blood rises, and vice versa. The question of time brought out by Dr. Clark he thought a point of value in his method. Eclampsia was certainly not a true uremia, and he was doubtful if the method would be of advantage in the prognosis of these cases. This was also claimed by Zweifel in the last number of the *Archiv. für Gynecologie*.

# N. O. Medical and Surgical Journal

---

## Editorial Department.

---

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

---

---

### Medical Department of the Army.

At the last meeting of the American Medical Association, at the general sessions, several papers were presented from the different government departments, the Navy, Army, Marine Hospital Service, Department of Agriculture, etc. It was really a long step forward in interesting the medical and scientific men of the government service in the affairs of the profession at large; more than that, it enlightened the several audiences of the above occasions as to what the medical and bureau men were doing in their own way. Now and then the daily press or some secular magazine may review the conditions of the different services of the Navy and Army and of late years more than usual has been exploited in these matters. "What the profession may (or can) do for the Army" was the title of one of the papers read at the Atlantic City session, and the reader of the paper emphasized the general indifference as well as ignorance of the profession at large as to the working of the army service.

We, of New Orleans, have had more than one opportunity of contact with the Army and Marine Hospital Service men and the records of our medical societies will show that we have profited no few times. But the main question is that of the interest the profession generally should entertain in the matter of the personnel of the Army and of the Navy. Ever since the Spanish war, numerous comparisons and criticisms have arisen regarding the disposition of the medical service of the Navy and that of the Army. Almost always these have begun after some more or less flagrant disorder in the army discipline. At the time of organization of irregular troops for the Cuban and Philippine services, a large number of contract surgeons were brought into the army, either without rank, or with rank entirely incommensurate with either the pay received or the service rendered. Many of these

men were carried into the regular service and still more continued in their anomalous offices. Disputes, lack of discipline, even ridicule arose in certain instances, enough so to occasion a serious minded appeal to the National Congress for a betterment of conditions, under regulations of proper and regular qualifications. Such a bill is now awaiting action in Washington. The JOURNAL is desirous of recording its own favor in its action and in doing so wishes to voice the spirit of the profession interested in good standards of medical fitness.

The bill is aimed at so enlarging the regular Medical Corps as to obviate the need of contract surgeons. At the same time the grade of the Army Medical Corps is to be raised to that of the Navy, in order that the superior officers may be experienced and at the same time better organized. It is interesting to note that although the Army of the United States has been increased 300 per cent., the Medical Corps has been increased only 67 per cent., the increase occurring only in the lower grades, viz:

Colonels, 33%; Lieut. Colonels, 20%; Majors, 20%; Captains and Lieutenants, 92%.

It is proposed, besides increasing the Army service commensurate with the Army itself, to provide a Medical Reserve Corps, who shall undergo the same examination for qualification, but who shall receive pay only when in active service, and who shall rank as first lieutenants; Contract Surgeons now in service are to be appointed officers of this Corps without examination.

The bill itself has been approved by the Secretary of War and is now before the Congressional Committees for their endorsement. We, of course, have only one voice but to the profession generally we submit that here is an opportunity of demonstrating "What the profession can do for the Army." Among the Southern members of the Congressional Committees are the Honorable Messrs. Pettus of Alabama, Blackburn of Kentucky, and Bate of Tennessee, in the Senate; Mr. Slayden of Texas, and our own congressman, the Hon. Broussard, in the House. Say one word to them, not of politics, but of purpose, arguing the better standing of our professional brethren in the Army; bringing home the actual fact that only here and there have the Medical Corps been able to do great work from the lack of opportunity on account of a vast amount of routine.

The Bill to increase the "Efficiency of the Medical Department of the United States Army" is an appeal to the intelligent endorsement of every thinking medical man who respects organization, recognition of good work and who appreciates the recognition of high standards for those who are qualified.

### Dr. Finsen is Dead.

While Finsen first became famous through the claim of discovery of the red-light treatment of smallpox, and although more than one has demonstrated his lack of title to this, his name must always be associated with the cure of lupus by light rays. All of the civilized world has gathered the estimate of the value of this treatment and all credit is given to the Copenhagen student, who sacrificed every effort and even, perhaps, his life to the achievement of better methods and results.

The stage of enthusiasm is now past and an intelligent survey of the usefulness of the Finsen light treatment may be had. Comparison with the X-ray and the radio-active principle, the high frequency and direct light treatments have been made and in not only lupus, but in all the affections likely to be influenced by any one or more of these methods.

Observers have obtained different results and have gathered varying conclusions accordingly. Some have discarded one or the other light method and have preserved their particular technic as the best. However, the Finsen treatment has survived the tests, from the evidence submitted, and is *faciliter* the treatment of tuberculosis of the skin, and has even promised results in tuberculosis affecting other, protected, organs. With other diseases, the story is perhaps almost told, and, like all new things in therapy, each is expectantly vaunted until time and the natural adjustment of fixed limitations demonstrate the contrary.

With all of this discussion, we carry a note of concordant admiration and high praise for the man who gathered the inspiration of good work and carried it to a practical application, to the end that medicine and surgery have been partly robbed of some of their horrors, and to the end that on his work greater achievement may be builded as the natural sequence of the light treatment develops.



### **The New Tulane President.**

During the summer, Dr. E. A. Alderman, president of Tulane, was elected to the presidency of the University of Virginia and he accepted this office. The vacancy created has been filled by Dr. E. B. Craighead, late president of the Missouri State Normal School.

Dr. Craighead comes to Tulane with the spirit of his predecessor, with the expressed purpose of developing the natural advantages of an institution already established on wholesome lines. We are always interested in Tulane's success, because its main strength for so long has rested in the Medical Department, and we are interested in the Medical Department in so far as to believe that its future must grow with the other departments of Tulane University, and that it must become greater, too.

Dr. Craighead has expressed the belief that Tulane is well endowed, and, further, that the future needs only opportunity to show a due rank for our Southern institution. Dr. Craighead is a practical man, from one of the most progressive states in the Union; he brings with him a proper energy and has, as yet, promised chiefly that he wants to work. He needs encouragement in so worthy a purpose and if the rank and file of his faculty, administrative board, alumni committees, etc., have not engendered that much, the JOURNAL wishes him every success and promises to be both free and fair in praise and blame as the work goes on.

## Abstracts, Extracts and Miscellany.

### Department of Obstetrics and Gynecology.

**in charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER, New Orleans**

**A CLINICAL STUDY OF ECLAMPSIA.**—An interesting extract of Myer's paper in the *Archiv. für Gynäkol.*, 1904, is printed in the *Jour. of Obst. & Gynec. of the British Empire*, and is of importance because of the autopsy findings.

The writer bases his observations upon 117 cases of eclampsia recorded in Wyder's clinic at Zurich during the last 18 years. There were 35 autopsies.

As regards the kidneys, old lesions were found in six cases. In the majority of the remainder degenerative changes in all stages were observed in the parenchyma. The surface was pale, often yellowish. Thromboses and hemorrhages were common. Inflammatory changes were rare. The writer remarks that frequently the degree of alteration observed in the kidneys was very slight in proportion to the severity of the changes in other organs and especially slight as compared with the alterations observed in the liver. This organ was approximately normal in only two cases. In the majority there were numerous small hemorrhages, and in 8 cases there were large infarcts together with smaller necrotic areas. Fresh secondary changes were seen in the heart in 11 cases in the form of epicardial and endocardial hemorrhages. Muscular degeneration was very common. Thrombi and infarcts were observed in the lungs, and in 8 cases there were subpleural and bronchial hemorrhages. Placental elements found in the maternal circulation are regarded by the writer as of frequent occurrence in, and by no means limited to, cases of eclampsia. In 21 of the cases there were cerebral lesions; edema, hydrops of the ventricles and hemorrhages of the pia and dura being observed.

In the cerebral substance was a series of apoplexies and hemorrhagic softenings. Hemorrhage into the alimentary canal was observed 12 times. The placental findings were various and not characteristic of eclampsia. The pathological findings in the foetuses were for the most part hemorrhages in various organs with small necroses in the liver and kidneys.

The general pathological results confirm those of Lubarsch, who describes the lesions characteristic of eclampsia as consisting of a combination of degenerative kidney changes, anemic and hemorrhagic necroses in the liver, hemorrhages and softenings in the brain and heart, with multiple thromboses.

The writer describes the case of a patient who died in the status eclampticus but without the appearance of convulsions, and whose autopsy revealed the characteristic appearances above mentioned.

**OCCIPITO-POSTERIOR POSITIONS OF THE VERTEX.**—The *Medical Record*, July 9, contains two papers on this subject. Marx states that as a primary state the condition is very frequent, though usually the vertex will rotate forward by itself. 1. Operate only in the face of clear indications on the part of either mother or child. 2. Operate at once when there is a tendency to posterior rotation. Secure marked flexion of the head by digital pressure on the sinciput. Maintain this flexion by placing the patient in the lateral prone position corresponding to the position of the occiput. If the child is dead or nearly so, use the perforator. With the child in good condition and with the head above the brim, version; with the head fixed, or below the brim, forceps. Marx is a strong advocate of the "rotary axis traction." This procedure is not without danger in inexperienced hands.

Polax states that in less than two per cent. of occipito-posterior positions the occiput rotates into the sacrum. He advises as follows: 1. With head above brim and membranes unruptured, only postural methods are to be considered. 2. Head at the superior strait and membranes ruptured, try postural methods, dilate cervix, and give the woman time. If after reasonable time the head has not rotated, or engaged, then: (a) Manual rotation of the head by combined internal and external manipulations; (b) Axis-traction forceps tentatively applied; (c) Version. 3. Head in the pelvic cavity: (a) Posture and digital attempts to produce complete flexion of the foetal head; (b) Forceps; either common forceps applied to the sides of the pelvis and taken off and re-applied as the head rotates, or axis-traction forceps applied to the sides of the head. 4. Vertex on the pelvic floor; rotate forward manually or by means of the forceps reversed. Failing in this obtain flexion of the fetal head and deliver the occiput over the perineum. The pelvic floor will be more or less torn.

## Department of Therapeutics.

In Charge of DR. J. A. STORCK, New Orleans.

THE EIGHTH DECENNIAL REVISION OF THE PHARMACOPEIA OF U. S. A.—Joseph P. Remington, of Philadelphia, says only such drugs as have been tried clinically will be placed in the pharmacopeia which is to appear October next. He believes that druggists who make cheapness rather than purity of drugs their object, should be punished. The pharmacopeia calls for certain tests to be applicable to certain drugs, but states specifically that these tests are to be applied to those which are used as medicines only. He spoke of the attempts that have been made to adopt an international pharmacopeia. Remington believes that the failure of adoption is due to the fact that each nation has been accustomed to use drugs with which its members are most familiar, so that one is inclined to put more value upon one drug than is another, consequently disagreement constantly arose and—no international pharmacopeia. The United States is the first nation to endorse the international pharmacopeia suggested at Brussels. Here many of the official preparations are of inferior strength to those of the United States, but attention is called to this so that the dose will be necessarily increased correspondingly. Such drugs as “carbolic acid” will receive their proper names, but the old ones will be retained as synonyms. Synonyms are discouraged. Average doses are given as they are thought to be of more value than maximum doses. Definite chemic names are used.—*American Medicine*.

SERUM TREATMENT OF LEPROSY.—Rost has manufactured a serum from cultures of the lepra bacillus which he has used in the treatment of this disease. Small pieces of pumice stone are washed and dried in the sun and then made to absorb beef extract. They are then placed in bottles having a wide central tube leading to the bottom, and an outlet tube at the top. Superheated steam is passed through the bottles, and acting on the beef extract in the pumice, carries over to a condenser the more nutrient values of the extract, the salts and non-volatile substances being left behind. The nutrient fluid is collected in sterilized Pasteur flasks, which, when cooled, are inoculated from cultures of leprosy. These flasks



are allowed to incubate at  $37^{\circ}$  C. for a period of one month to six weeks, until they present a turbid appearance and a stringy, white, curly, heavy cloudiness in the flask. The cultures are then passed through a sterilized Pasteur filter several times, after which they are reduced to about one-tenth the original bulk by exhaustion over sulphuric acid in a vacuum; the fluid is then mixed with an equal quantity of glycerin and kept in an icebox until required for use. Ten c. c. of this fluid (leprolin) causes a violent reaction in a case of leprosy, the temperature rising to  $104^{\circ}$  F., and the patches becoming red, hot and swollen. Thirty-five cases of leprosy have now been injected with leprolin, and in most of them the injections have been followed by very marked improvement, and in some by almost complete subsidence of the disease. Two cases have apparently been almost cured, there remaining hardly any sign of the original disease. In those cases where the reaction after the injection is severe, there was a great improvement in their condition, whereas in those cases where there was only a slight or no reaction, the improvement was slight or nil. Rost believes that leprolin has a very marked beneficial action in the disease, which is not accompanied by any danger of aggravation; that its continued and persistent use will dispel all signs of the disease.—*Indian Medical Gazette—Jour. A. M. A.*

EMANIUM.—A strongly radio-active earth consisting chiefly of lanthanum has been obtained from pitchblende by Giesel, a German chemist. Says the *American Journal of Science*: "He finds that the behavior of the material is different from that of radium, and believes that he has obtained a new element which he calls emanium and which he hopes to separate from lanthanum. The striking characteristic of this material appears to be an emanation given off by it. When air is blown through a flask containing preparations of the substance enclosed in paper capsules, and the air issues from a tube against a blende screen, a brilliant illumination is produced, and scintillations can be observed, even with the naked eye. The "sparks" are more distinct and larger than those produced by radium or polonium, and hence the material is more effective than these for use in the spinthariscopes."

## Department of the Ear, Nose and Throat.

---

In charge of **A. W. DEROALDES, M. D.,** and **GORDON KING, M. D.,**  
New Orleans.

---

**VIOLET RAYS IN DISEASES OF THE LARYNX.**—Levenson, of St. Petersburg, before the section of laryngology at the Russian Congress of Pirogov, related his experience with the violet rays in the treatment of laryngeal diseases, and draws therefrom very favorable conclusions as to the value of this new therapeutic agent. The author made use of a Philips lamp of 50 candle power, with which he directed the rays upon the anterior surface of the neck at a distance of 40 to 45 centimeters for a half hour every day or every other day, excluding at the time every other form of treatment. Of fourteen cases treated in this manner 2 were acute laryngitis, 5 chronic laryngitis, 2 incipient tuberculosis, 2 advanced tuberculosis, 1 lupus, 1 papilloma and 1 recurrential paralysis. He claims that the rays produce a favorable influence on both acute and chronic catarrhal affections of the larynx by increasing the tonicity of the muscles and improving the nutrition of the tissues. In the early stages of laryngeal tuberculosis it is a most valuable healing agent, but has no apparent effect in the more advanced type associated with ulceration and perichondritis.

**PHOTOTHERAPY IN EAR DISEASES.**—Experiments were recently made in the services of Prof. Okonner, of St. Petersburg, with the incandescent light in the treatment of certain affections of the ear. The experiments were conducted by Dr. Meerovich, who employs a metallic cylinder carrying an incandescent lamp of ten candle power from which the light is thrown through a plano-convex lens, and thence through an otoscope upon the affected ear drum. The cylinder is so arranged that water is made to circulate through it to overcome the heat rays. The light is applied to the ear for fifteen minutes at each sitting.

In catarrhal otitis the effect is to relieve the pain and hasten the resorption of the mucous or serous exudate. In cases of chronic dry otitis and the sclerotic forms it has the effect of diminishing the subjective noises, but the author does not state the effect it has, if any, upon the bearing in such cases.

**THE USE OF YOHIMBIN IN RHINO-LARYNGOLOGY.**—This agent has been the subject of recent investigation in the clinics of Europe to ascertain its value as a local anesthetic for the mucous membranes. A solution of 5 per cent. of the sulphate or the lactate when applied to a mucous surface produces sufficient anesthesia for surgical work, but as differing from the effect of cocaine, produces a dilatation instead of a contraction of the arterioles, and hence predisposes to hemorrhage. Strubell thought this effect might be productive of favorable results in the treatment of ozena, but his experiments along this line were negative, probably due to the fact that in ozena the erectile tissues undergo atrophy as well as the mucous membrane.

---

## Department of Ophthalmology.

---

In Charge of **DES. BRUNS AND ROBIN**, New Orleans.

---

The following abstract of interest in connection with the case reported to the Louisiana State Medical Society at its last meeting by Dr. Thornhill is to be found in the January, 1904, number of the *Annals of Ophthalmology*. C. Steindorff, in *Centralbl. f. Augenh.*, reports a case of wound with a revolver into the left temple 4 mm. behind the external canthus, with V., L.=O V. R.=fingers excentrically at 30 cm., apparently lacerated both optic nerves. Ophthalmoscope showed optic atrophy, hemorrhages, extensive rupture of choroid and retina, with new formation of connective tissue.

**CONTRIBUTIONS TO THE SYMPTOMATOLOGY AND TREATMENT OF EXOPHTHALMIC GOITRE.**—Voss, of St. Petersburg, *Medic. Woch.*, 1903, No. 33, reports two cases with unusual complications, viz., in the first, ophthalmoplegia externa (paralysis of right superior and external, left inferior and external recti); in the second, choreic tremor. He warns against iodine, as he saw the first symptoms of the disease develop after energetic applications of iodine on a small goitre that had existed for years. His favorite remedy is bromine.

**CORRELATION OF BLINDNESS AND USUAL SYMPTOMS OF LOCOMOTOR ATAXIA.**—It is generally thought that when a patient suffering from locomotor ataxia becomes blind, other symptoms of the disease do not appear or have no tendency to increase. Dr. Pierre Marie does not admit this, and has recently published statistics based on 45 cases. In 32 cases where the patient was already blind, the pains came on in 16 after an interval of a few months in some. In others the pains came on nine, ten, or twelve years before the blindness. When the blindness came on rather late after the appearance of the shooting pains, the pains disappeared in only three cases out of 16, and then after a long period of time. In six amaurotic patients the pains were still as acute after eight, eleven, twelve, seventeen and twenty years. As for the ataxic symptoms they have not seemed influenced, appearing before or after the eye trouble. Dr. Marie concludes that it is impossible to consider that the blindness can have any effect on the other symptoms of locomotor ataxia.—*Journ. Amer. Med. Assn.*, July 16, 1904.

---

## Department of Nervous and Mental Diseases.

---

In charge of DR. P. E. ARCHINARD and DR. ROY M. VAN WART,  
New Orleans.

---

**DIPHThERITIC PARALYSIS.**—Aubertin (*Archives gen. de med.* 1903, No. 6, ref. *Centralb f. Kinderheilkunde*) basing his conclusions on 65 cases of diphtheritic paralysis in children and adults thinks that the relatively greater frequency of these cases in adults is apparent only as many cases of slight throat affections, properly diphtheria, in children are not reported as such. He thinks that albuminuria more commonly accompanies the early paralysis than the late cases, but bears no direct relation to the severity of the paralysis. The situation of the diphtheritic lesion bears no relation to the seat of the paralysis.

The paralysis as a rule affects whole muscle groups, rarely individual muscles. The muscles of the palate are most frequently



involved. This paralysis is often only partial; sensory changes are the exception and were noted in only 3 cases.

Accommodation paralysis, always bilateral and without mydriasis, was observed in 19 cases. The condition present was the opposite of that known as the Argyll-Robertson pupil.

Paralysis of the eye muscles was noted in 7 cases. This was only a partial paralysis and involved usually one muscle, most frequently the rectus internus or externus.

Two forms of paraplegia were noticed, a moderate and a severe; the moderate was manifested as a motor weakness without atrophy; the severe usually presented atrophy. Both forms appeared as a flaccid motor paralysis without sensory disturbance and without involvement of the sphincters. Isolated paralysis as of the face or diaphragm were not observed. As constant symptoms of diphtheritic paralyzes were noted absence of the patellar and Achilles tendon reflexes and absence of the Babinski phenomenon. The skin reflexes were variable, diphtheritic ataxia was not observed and Aubertin is doubtful as to its existence.

The "bulbar crises" described by Guthrie were not observed. In a suddenly fatal case with myocarditis no changes were found in the medulla. He concludes the cause to be most frequently a peripheral neuritis but thinks there may in some cases be a slight anterior poliomyelitis. (It is questionable whether the cell changes in the spinal cord which have been shown, to accompany all forms of neuritis can be considered poliomyelitis. In two structures so intimately related as the peripheral nerves and their central cells it is difficult to understand how one would undergo an extensive degenerative change without some change being present in the other. Recent researches have shown the degenerative disturbances to be much more extensive than was formerly supposed. Aubertin treated one of his cases with antitoxin with apparently no results. This is readily understood when we remember that the damage has already been done to the nerves when the paralysis appears.)

Sharp (*Brit. Med. Jour.* 1903) reports a case in which four weeks after an attack of diphtheria which was treated by 4,000 units of antitoxin, paresis of the neck muscles appeared. The child was unable to hold the head erect and the chin rested on the

sternum. There was also paralysis of the soft palate. The case ended in complete recovery.

Bacialli (ref. *Centralb. f. Kinderheilkunde.*) reports four cases where meningitis occurred as a complication of laryngeal diphtheria. The cases all ended fatally. In one case the infection was due to the pneumococcus in the other 3 to a streptococcus.

(The use of antitoxin in the treatment of diphtheria does not seem to have lessened the number of cases showing paralytic phenomena. On the contrary, there seems to be an opinion that it is more frequent. This is due to the fact that cases are more frequently brought under observation, as parents in their efforts to ascribe a cause for any complication, seize on the most prominent event in the treatment, the administration of the antitoxin. They consequently blame the physician for a condition which he was unable to prevent. The treatment of these cases is that for any form of neuritis. Special attention should be paid to the prevention of broncho-pneumonia and the frequent heart weakness. The recovery is usually complete in all cases.)

---

## Miscellaneous.

---

### **The Bill to Increase the Efficiency of the Medical Department of the United States Army.**

(As approved by the Secretary of War, February 18, 1904.)

BE IT ENACTED BY THE SENATE AND HOUSE OF REPRESENTATIVES OF THE UNITED STATES OF AMERICA IN CONGRESS ASSEMBLED, That from and after the approval of this act the medical department of the United States Army shall consist of one surgeon general, with the rank of brigadier general; a medical corps and a medical reserve corps, as hereinafter provided; and the hospital corps, the nurse corps and dental surgeons as now authorized by law.

SEC. 2. That the medical corps shall consist of sixteen colonels, twenty-four lieutenant-colonels, one hundred and ten majors, and three hundred captains or first lieutenants, who shall have rank, pay and allowances of officers of corresponding grades in the cavalry arm of the service. Immediately following the approval of this act all officers of the medical department then in active service, other than the surgeon general, shall be recommissioned in the

corresponding grades in the medical corps established by this act, in the order of their seniority and without loss of relative rank in the army, as follows; assistant surgeons general, with the rank of colonel, as colonels; deputy surgeons general, with the rank of lieutenant colonel, as lieutenant colonels; surgeons with the rank of major, as majors; assistant surgeons who had attained the rank of captain on or before December 25, 1903, as captains; assistant surgeons, with the rank of first lieutenant who at the time of the approval of this act shall have served less than three years as such in the regular army, as first lieutenants; *Provided*, That assistant surgeons who at the time of the approval of this act shall have served three years or more in the regular army as such and who had not attained the rank of captain on or before December 25, 1903, shall, subject to examination, be recommissioned in the medical corps in the order of their seniority, as captains, to rank as such from the date of the approval of this act: *Provided further*, That any assistant surgeon with rank of first lieutenant who has heretofore failed to qualify for promotion to the rank of captain and is now under suspension shall be recommissioned in the medical corps as first lieutenant with rank as such from date of his commission as assistant surgeon and shall, at the end of his period of suspension, be again examined in accordance with existing law, and if found qualified shall be commissioned in the medical corps as captain with the rank to which he would have been entitled under the terms of this section had he not been under suspension; if he fails to pass such examination he shall be honorably discharged from the service with one year's pay as provided by section five of this act.

SEC. 3. That promotions in the medical corps to fill vacancies in the several grades created or caused by this act, or hereafter occurring, shall be made according to seniority, but all such promotions and all appointments to the grade of first lieutenant in said corps shall be subject to examination as hereinafter provided: *Provided*, That the increase in grades of colonel, lieutenant-colonel and major provided for in this act, shall be filled by promotion each calendar year of not exceeding two lieutenant-colonels to be colonel; three majors to be lieutenant-colonels; fourteen captains to be majors; and of the increase in the grade of first lieutenant not more than twenty-five per centum of the total of such increase shall be appointed in any one calendar year: *Provided further*, That a first lieutenant of the medical corps upon the completion of three years service including service as assistant surgeon in the regular army, or as surgeon or assistant surgeon in the volunteer army during the war with Spain or since, or on active duty as first lieutenant in the medical reserve corps as hereinafter provided, shall be entitled to the pay and allowances of a captain of the medical corps, and when the aggregate of his service either as first lieutenant in the medical corps or as assistant sur-



geon in the regular army equals three years he shall be entitled, subject to examination, to promotion to the grade of captain in the medical corps.

SEC. 4. That no person shall receive an appointment as first lieutenant in the medical corps until he shall have successfully passed an examination, under regulations to be prescribed by the Secretary of War, before an army medical board consisting of not less than three officers of the medical corps, to be designated by the Secretary of War.

SEC. 5. That no officer of the medical corps shall be promoted therein until he shall have successfully passed an examination before an army medical board consisting of not less than three officers of the medical corps to be designated by the Secretary of War, such examination to be prescribed by the Secretary of War and to be held at such time anterior to the accruing of the right to promotion as may be for the best interests of the service: *Provided*, That should any officer of the medical corps fail in his physical examination and be found incapacitated for service by reason of physical disability contracted in the line of duty he shall be retired with the rank to which his seniority entitled him to be promoted, but if he should be found disqualified for promotion for any other reason a second examination shall not be allowed, but the Secretary of War shall appoint a board of review to consist of three medical officers superior in rank to the officer examined, none of whom shall have served as a member of the board which examined him. If the unfavorable finding of the examining board is approved by the board of review the officer reported disqualified for promotion shall, if a first lieutenant or captain, be honorably discharged from the service with one year's pay, and if a major or lieutenant-colonel, shall be debarred from promotion and the officer next in rank found qualified shall be promoted to the vacancy. If the action of the examining board is disapproved by the board of review the officer shall be considered qualified and shall be promoted.

SEC. 6. That nothing in this act shall be construed to legislate out of the service any officer now in the medical department of the army, nor to affect the relative rank for promotion of any medical officer now in the service, or who may hereafter be appointed therein, as determined by the date of his appointment or commission.

SEC. 7. That for the purpose of securing a reserve corps of medical officers available for military service the President of the United States is authorized to issue commissions as first lieutenants therein to such graduates of reputable schools of medicine, citizens of the United States, as shall from time to time, upon examination to be prescribed by the Secretary of War, be found physically, mentally and morally qualified to hold such commissions, the persons so commissioned to constitute and be known as the medical reserve corps. The commissions so given shall confer upon the holders



all the authority, rights and privileges of commissioned officers of the like grade in the medical corps of the United States Army, except promotion, but only when called into active duty as hereinafter provided and during the period of such active duty. Officers of the medical reserve corps shall have rank in said corps according to date of their commissions therein and when employed on active duty as hereinafter provided shall rank next below all other officers of like grade in the United States Army: *Provided*, That contract surgeons now in the military service, who receive the favorable recommendation of the surgeon-general of the Army, shall be eligible for appointment in said reserve corps without further examination.

SEC. 8. That in emergencies the Secretary of War may order officers of the medical reserve corps to active duty in the service of the United States in such numbers as the public interests may require and may continue such officers on such duty so long as their services are necessary: *Provided*, That nothing in this act shall be construed as authorizing an officer of the medical reserve corps to be ordered upon active duty as herein provided who is unwilling to accept such service, nor to prohibit an officer of the medical reserve corps not designated for active duty from serving with the militia, or with the volunteer troops of the United States, or in the service of the United States in any other capacity; but when so serving with the militia or with volunteer troops or when employed in the service of the United States in any other capacity, an officer of the medical reserve corps shall not be subject to call for duty under the terms of this section: *And provided further*, That the President is authorized to honorably discharge from the medical corps any officer thereof whose services are no longer required: *And provided further*, That officers of the medical reserve corps who apply for appointment in the medical corps of the army may, upon the recommendation of the surgeon general, be placed on active duty by the Secretary of War and ordered to the army medical school for instruction and further examination to determine their fitness for commission in the medical corps.

SEC. 9. That officers of the medical reserve corps when called upon active duty in the service of the United States as provided in section eight of this act shall be subject to the laws, regulations and orders for the government of the regular army, and during the period of such service shall be entitled to the pay and allowances of first lieutenants of the medical corps with increase for length of service now allowed by law, said increase to be computed only for time of active duty: *Provided*, That no officer of the medical corps shall be entitled to retirement or retirement pay; nor shall he be entitled to pension except for physical disability incurred while in active duty and in line of duty.

SEC. 10. All acts and parts of acts in conflict with the provisions of this act are hereby repealed.

**ADRENALIN IN DYSENTERY:** Dr. E. R. Branch reports adrenalin chloride given to a patient suffering from profuse melena occurring in an attack of bilious remittent fever with the result of checking the discharge completely in 24 hours. Ten drops of a 1 to 1000 solution was given every 4 hours.

Two children with dysentery were subsequently treated. The bleeding stopped in two days, and in three days the stools were quiet normal, xeroform and dermatol being additionally given. The argument of the treatment is based upon the tendency of adrenalin and extracts of the suprarenal capsule to act as styptics and anti-hemorrhagics.

---

## Louisiana State Medical Society Notes.

---

In charge of DR. P. L. THIBAUT, Secretary, 163 University Place.

---

**OFFICERS**—President, Dr. Charles Chassaignac, New Orleans; 1st Vice President, Dr. Oscar Dowling, Shreveport; 2nd Vice President, Dr. L. C. Tarleton, Marksville; 3rd Vice President, Dr. J. F. Buquoi, Colomb; Secretary, Dr. P. L. Thibaut, New Orleans; Treasurer, Dr. M. H. McGuire, New Orleans.

**COUNCILLORS**—Drs. A. G. Friedrichs, Chairman, 2nd Cong. Dist., 641 St. Charles St., New Orleans; J. J. Ayo, Sec'y., 3rd Cong. Dist., Bowie; P. E. Archinard, 1st Cong. Dist., New Orleans; S. L. Williams, 5th Cong. Dist., Oak Ridge; N. K. Vance, 4th Cong. Dist., Shreveport; C. M. Sitman, 6th Cong. Dist., Greensburg; C. A. Gardiner, 7th Cong. Dist., Sunset.

---

The attention of the secretaries of parish societies is called to the fact that Dr. P. L. Thibaut has been appointed Secretary of the State Society by President Chassaignac, vice Dr. I. I. Lemann, resigned. Although this announcement was made in the last issue of the JOURNAL, letters and request for information are still being sent to the former Secretary.

Secretaries and treasurers of Parish Societies are requested to send all remittances to Dr. M. H. McGuire, Treasurer, No. 731 Carondelet St., New Orleans, and not to the Secretary.

THE AVOYELLES PARISH MEDICAL SOCIETY met in regular quarterly session at Marksville, at the Callegarhi Hotel, on Thursday, Oct. 8. Two new members were elected to membership: Dr. Henry Buck, Red Fish, and Dr. A. A. Daniel, Sarah. This addition brings the membership up to 29—the largest medical society out-

side of Orleans and Caddo. The Society is very enthusiastic and perfect harmony prevails at all its sessions.

The physicians of Marksville entertained the visiting members at a splendidly arranged banquet which was much enjoyed.

The subject for discussion was "Fevers." Dr. Matthews of Bunkie, opened the discussion by relating the history of a case of typhoid fever with a persistently high temperature. The patient had to be sponged, packed, or tubbed on an average of every three hours for a period of over ten days. Convalescence had begun at the time of the meeting. Discussion followed by Drs. Roy, Regard, Ducoté de Nux and Couvillion.

The question of a correct diagnosis of typhoid provoked some discussion; the consensus of opinion agreeing that any fever which could not be accounted for by inflammatory conditions and which did not yield to thorough cinchonization in a period of six or seven days, was to be regarded as typhoidal.

The question of Malarial Hematuria was opened by Dr. Drouin of Mansura. Two sections of the parish show that within recent years there has been no diminution in the number of cases. In the practice of the physicians of Marksville and Plaquemine several cases were reported; in other sections where heretofore the disease has been common there has been no cases for several years. A majority of the members condemn the use of quinin in the treatment of this condition—though hypodermics of quinin and urea have at times given favorable terminations. Calomel, hypodermic of soda, Fowler soln., and nux vomica are the principal agents used. The more malignant cases: Heavily jaundiced skin, accompanied with dyspneic condition, nervous phenomena and the emesis of a grass green material are seldom successfully treated—all die.

The members present at the meeting were: Drs. Couvillion, Quirk, Matthews, Roy, Ducoté, Regard, R. G. Ducoté, Kiblinger, E. De Nux, S. De Nux, Barbin, Lemoine, Couvillion, Daniel, and Hy. Buck.

The next meeting will be held at Mansura on Thursday, Jan. 5, 1905, at 8 p. m. At this meeting the election of officers for the ensuing year and other business will be attended to.

The subject selected for discussion is "Obstetrical Surgery."

Reported by E. Stanley Matthews, M. D., Secretary.

## Medical News Items.

---

THE TULANE MEDICAL BULLETIN made its appearance October 8. It is a sheet of 8 pages and will appear weekly. The first issue is well edited and carries quite an amount of clean matter of interest not only to the students at the Medical Department but to the Alumni in the profession as well. The periodical should be well supported and the JOURNAL congratulates the editorial staff on their highly commendable maiden effort and trusts that it may continue in the same style.

The editorial staff consists of the following gentlemen: Editor-in-chief, Howard Clarke, '05; Asst. Editors, Drs. J. J. Wyman, '05, Charity Hospital; S. P. Klotz, '03, Touro Infirmary; A. Henriques, '06, Junior Class; P. E. Bechet, '03, of the Alumni, with Lewis H. Marks '06, as business manager and J. Fred Dunin, '06, assistant business manager.

THE LOUISIANA TUBERCULOSIS SANITARIUM at Covington, La., is to be opened some time during December for the modern care modern care and treatment of consumptives.

GAILLARD'S MEDICAL JOURNAL of New York has consolidated with *Southern Medicine* and the two journals operating from New York and Savannah, Ga., will now appear under the common name of *Southern Medicine and Gaillard Medical Journal*. We wish the new enterprise continued success.

THE FIFTH DISTRICT MEDICAL BULLETIN announces its official appearance with the August issue from San Antonio, Texas. Drs. J. S. Lankford and J. V. Spring are the editors, with associates distributed among the several towns adjacent to San Antonio and comprises the Fifth District Medical Society. The first number carries considerable news and is additionally enhanced by excellent photo cuts of prominent men in Southwest Texas.

NEW ORLEANS COLLEGE OF DENTISTRY. The Senior Class elected officers for the current year as follows: Benj. Vidaurn, Pres; J. J. Clark, Vice-Pres; James A. Evans, Secretary; Sidney A. Donoldson, Treasurer; R. Ruiz Bailey, Historian.

THE NATIONAL WHOLESALE DRUGGISTS' ASSOCIATION are to



hold a convention in New Orleans, beginning November 14. About 300 delegates are expected, and an excellent program has been arranged.

THE HOTEL DIEU TRAINING SCHOOL FOR NURSES held an informal commencement on Thursday, October 13, graduating six nurses.

THE TRAINED NURSES ASSOCIATION OF LOUISIANA are to have a series of lectures during the winter, to be delivered by various members of the medical profession.

THE NEW YORK SKIN AND CANCER HOSPITAL announces a series of Lectures on Skin Diseases by Dr. L. Duncan Bulkley, on Wednesday afternoons, at 4:15, commencing November 2.

MARRIED: On October 3, at Cincinnati, Dr. I. I. Lemann, of New Orleans, and Miss Stella Hirsch, of Cincinnati. Dr. and Mrs. Lemann left for an extended stay in Europe.

PERSONAL: Dr. C. P. Wertenbaker of the P. H. & M. H. service has been transferred from New Orleans to Ellis Island, New York. Dr. A. C. Smith is to hold the position vacated by Dr. Wertenbaker at the New Orleans Station.

PROF. S. E. CHAILLE is back from a trip through California and the West. Drs. F. W. Parham, J. F. Oechsner, J. B. Elliott, Jr., Charles Chassignac, H. S. Cocram, Paul Reiss, A. B. Gaudet, S. R. Olliphant, E. D. Fenner, Otto Lerch and S. M. D. Clark have also returned.

THE SIXTEENTH ANNUAL SESSION OF THE TRI-STATE MEDICAL SOCIETY OF ALABAMA, GEORGIA AND TENNESSEE was held in Chattanooga, October 12, 13, and 14. The attendance of doctors from these states was less than expected, while the visiting physicians from a distance was larger. The Chattanooga and Hamilton counties' Medical Society gave the doctors a banquet at the Reed House. The following officers were elected for the coming year: Pres., Dr. H. L. Appleton, Center, Ala; Dr. Raymond Wallace, Chattanooga, Sec.

THE TRI-STATE MEDICAL ASSOCIATION OF LOUISIANA, ARKANSAS AND TEXAS was organized at Shreveport, October 13, with Dr. J. R. Dale, Texarkana, Ark., pres; Dr. T. E. Schumpert, of Louisiana, vice-pres; and Dr. L. Abramson, Louisiana, Sec. The meeting will take place in Shreveport, November 16.

ADULTERATED DRUGS: JOHN E. KING, DAVID B. COMER AND

DAVID B. COMER, JR., were placed under bond to appear before the U. S. Circuit Court, in November, for fraudulent use of the mail. These men operated at No. 126 Bourbon street and sold adulterated phenacetin. King was placed under a \$1,000 bond and the Comers, father and son, \$500.

THE BOARD OF HEALTH OF JEFFERSON PARISH, Pres. Dr. C. M. Brady, held a meeting, October 13, and passed an ordinance forbidding the use of sardines and other fish or shrimp shell powder, or other refuse deleterious to public health as fertilizer. There has been a great deal of complaint that the use of these attracts flies.

DIED: DR. FELIX E. SCHILLING, at Hattiesburg, Miss., Oct. 5. He was buried in New Orleans. Dr. Schilling graduated from the Pharmaceutical Department, of Tulane, in 1898 and from the Medical Department, in 1900, and located at Collins, Miss., where he had a good practice.

PERSONAL: Dr. G. McG. Stewart has moved from Longhill, La., to Batchelor.

Dr. T. E. Schumpert, of Shreveport, has been appointed a member of the State Board of Health, to succeed Dr. J. C. Egan.

INTERNATIONAL CONGRESS ON TUBERCULOSIS: Dr. Quitman Kohnke, who was in attendance, gives the following account of the International Congress on Tuberculosis, which convened under the auspices of the American Congress on Tuberculosis and the Medico-Legal Society of New York City and which held a number of interesting meetings at the World's Fair Grounds, in St. Louis, on Oct. 3, 4, and 5:

"Delegates were registered from as far north as Ontario and as far south as Peru, and from the States. Four members were present from Louisiana. Notable among the delegates were two ladies, Dr. Annie G. Lyle of San Francisco (who, with Dr. Foster, Secretary of the State Board of Health, comprised the California delegation) and Dr. Scott of Iowa, who is a member of a medical society composed entirely of female physicians. Dr. Lyle, for California, protested vigorously and most ably against the practice of sending consumptives to her State to spread infection there.

"The Congress is not limited in membership to physicians, but includes all who are interested in the prevention of tuberculosis.

Naturally a goodly portion of its members are health officers, and naturally also preventive rather than curative treatment of the disease received the main consideration.

"Among the important resolutions passed were those looking to the establishing of institutions for the segregation of state supported tuberculosis patients, and the enactment of laws providing for the proper ventilation and sun lighting of buildings, especially the rented dwellings of the poor.

"The next Congress will be called in two years at the place selected by the American Medical Association for its meeting and about a week previous to the Medical meeting.

"Dr. F. E. Daniel of Texas, was elected president, and Dr. M. M. Smith, also of Texas, was elected Secretary.

"Louisiana is represented on the Council, which with the officers comprise the executive body of the Congress.

"The main function and object of the Congress seem to be to call to the attention of and impress upon legislative authorities generally, the importance of considering tuberculosis as a preventable disease and a proper subject of legislative concern.

"Dr. Daniel of Texas, cited with justifiable pride the disinfection of tuberculosis of the Pullman coaches in Texas, a result achieved only by earnest and persistent appeal.

"The transactions of the Congress, including many papers read by title only, will be published."

THE STATE MEDICAL EXAMINING BOARD OF LOUISIANA passed 15 out of 21 applicants in the examination held Oct. 21-22. Those successful were Drs. Joseph Hume, Lester J. Williams, E. A. Poret, Victor Geoffrion, W. M. Schultze, E. D. Gardner, L. H. Pirkle, R. A. Davis, N. O. Bourque, C. P. Gray, G. M. Graham, W. McG. Dollerhide, W. T. Franklin and W. M. Richards.

Four midwives, all colored, were also licensed by the Board.

TULANE MEDICAL DEPARTMENT OPENS. The preliminary lectures began October 24 with an enrollment of over 300 students. A number of changes have been made in the personnel of the teaching force since last session and in a number of the branches embraced in the schedule. Prof. J. T. Halsey, of the chair of Materia Medica, with Prof. L. F. Reynaud now Emeritus Professor, has instituted both a pharmacological and a physiological laboratory. Dr. P.

E. Archinard has been made lecturer and clinical instructor on diseases of the nervous system, in addition to the teaching in bacteriology, which he will continue. Other changes already noted in the JOURNAL have been the promotion of several of the lecturers to associate professors, viz.; Dr. Isadore Dyer, Diseases of Skin; Dr. J. B. Elliott, Jr., Clinical Medicine; Dr. E. D. Fenner, Diseases of Children. Besides Dr. J. M. Bathelor was made associate professor on clinical surgery and Dr. Gordon King was made lecturer and clinical instructor on Diseases of the Ear, Nose and Throat.

Other changes are as follows: Dr. S. M. D. Clark and Dr. Samuel Logan, junior assistants and demonstrators of Operative Surgery; Dr. Geo. S. Brown, demonstrator in the Pharmaceutical Laboratory; Dr. C. L. Eshleman, assistant Clinical Instructor in Physical Diagnosis.

---

## Book Reviews and Notices.

---

*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

---

*The Surgery of the Heart and Lungs*, by BENJAMIN MERRILL RICKETS, PH. B., M. D. The Grafton Press, New York, 1904.

This is a timely, thorough and most useful work in this triumphant age of bold and advanced surgery.

The author first presents to the reader a succinct and no doubt thoroughly reliable history of the surgery of the heart and lungs. Then follows after each subject mentioned the author's original work—a record of his numerous experiments on the heart and lungs of dogs.

Over 80 very fine and clear illustrations enhance the value of the book.

The bibliography of over 150 pages in this work of about 500 pages, is systematically distributed after each chapter for ready reference. We heartily recommend this valuable and most important surgical contribution to the student and practitioner of medicine.

LARUE.



*A Text-Book of Clinical Diagnosis by Laboratory Methods*, by L. NAPOLEON BOSTON, A. M., M. D., W. B. Saunders & Co., Phila., 1904.

Dr Boston is known among laboratory workers as a careful and conscientious man, and as one whose opinion has been salted by experience.

The manual before us is a practical exposition of clinical laboratory methods written in an easily readable style. It is written so as to lead one by progressive steps to the understanding of the various procedures in clinical technique, the different steps being shown where possible by illustrations. All subjects usually to be found in a work of this nature are given ample consideration. The chapter on the blood is unusually good and the chapters on animal parasites and on the secretions of the eye and ear receive adequate attention.

The subject of serum diagnosis is well and closely considered. The illustrations, so important to a work of this character, are excellent. The thoroughly practical manner in which the author has performed his task will meet with general approbation. STORCK.

*A Text-Book of Physiological Chemistry for Students of Medicine and Physicians*, by CHARLES E. SIMON, M. D., Lea Brothers & Co., Phila.,

Simon's Physiological Chemistry has now passed to its second edition and its sphere of usefulness has increased much since 1901.

While this work has been written primarily for the student, yet, at the same time, it will prove useful to the practitioner, especially to those whose medical education was obtained before the importance of laboratory training in physiological chemistry was recognized.

This edition bears the earmarks of careful revision. The chapters on the albumins, on the products of nitrogenous katabolism and on gastric and tryptic digestion have been almost entirely rewritten. He has introduced laboratory exercises with special reference to the text.

It is along the line of physiological chemistry that many of the problems of medicine must be investigated and solved. It, therefore, behooves each one of us to inform himself on a branch of study hitherto much neglected. We think the work of Simon has had a stimulating effect in promoting the study of physiologic chemistry. STORCK.

*A Text-Book of Human Physiology*, by ALBERT P. BRUBAKER, A. M., M. D., P. Blakiston's Son & Co., Phila., 1904.

Prof. Brubaker is known to most students in the United States through his excellent compendium on physiology. The present volume is more pretentious and covers the field of physiology as applicable to everyday practice.

Physiology in its direct relation to clinical medicine is given the most prominent place in this work and "such facts have been selected as not only elucidate the normal functions of the tissues and organs of the body, but which will be of assistance in understanding their abnormal manifestations as they present themselves in hospital and private work."

The chapter on the general physiology of nerve tissue is lucid and ample and will be appreciated alike by student and practitioner.

The subject of digestion covers 161 pages; the treatment of the blood and circulation includes 208 pages. We know of no American text-book which contains as much sound physiological information as that of Brubaker. STORCK.

*Bacteria in Milk and its Products*, by H. W. CONN, PH. D. P. Blakiston's Son & Co., Philadelphia, 1903.

It is a well known fact that there is often a direct connection between the milk supply of the community and the spread of certain diseases. This point should be constantly brought before the attention of the people through the medium of boards of health and sanitarians in general.

The work under review is pertinent to the subject. In speaking of the growth of bacteria in milk, Dr. Conn says: "The original contamination may be a few thousands or perhaps many thousands per *c. c.*, but the milk distributed in our cities often contains them by the hundreds of thousands, and frequently by millions. These larger numbers are the result of the multiplication of the original bacteria and their number depends upon two factors: (1) The temperature of the milk, (2) the age of the milk. Of these two factors the temperature is the more important. Indeed, the temperature at which the milk is kept is of more importance in regulating the number of bacteria than the extent of the original contamination." The intelligent handler of milk will find this book replete with information which will be most helpful to him. STORCK.

## Publications Received.

**P. Blakiston's Son and Co.,** Philadelphia.

*Refraction and How to Refract.* Thorington.

*Clinical Lectures and Essays on Abdominal and other Subjects*, by Dr. H. D. Rolleston.

*Hand-Book of Surgical Anatomy*, by Drs. G. A. Wright and C. H. Preston.

*Enlargement of the Prostate.* 3rd Edition. Moullin.

**G. P. Putnam's Sons,** New York and London, 1904.

*Strabismus or Squint. A Supplement to the Errors of Refraction*, by Dr. Francis Valk.

**W. B. Saunders and Co.,** Philadelphia, New York and London.

*A Text-Book of Clinical Diagnosis*, by L. Napoleon Boston, M. D.

**W. T. Keener and Co.,** Chicago, 1904.

*Physiological Feeding of Infants*, by Dr. Eric Pritchard.

**Lea Bros. and Co.,** Philadelphia and New York, 1904.

*Diseases of the Skin*, by Dr. James Nevins Hyde and Dr. F. Hugh Montgomery.

*Treatise on Obstetrics*, by Dr. Edward P. Davis.

*Progressive Medicine.* Vol. VI., No. 3. Hare-Landis.

*A Text-Book of Physiological Chemistry*, by Dr. Charles E. Simon.

*Nervous and Mental Diseases*, by Dr. Jos. Darwin Nagel.

**F. A. Davis Co.,** Philadelphia, 1904.

*Diseases of the Nose, Throat and Ear*, by Dr. Seth Scott Bishop.

*Anatomy and Diseases of the Eye and Ear.* Roosa and Davis.

**Wm. Wood and Co.,** New York, 1904.

*Reference Hand-Book of the Medical Sciences.* Vol VIII. Buck.

**T. Eisele,** Chicago, 1904.

*Practical Electro Therapeutics*, by Dr. Franklin B. Gottschalk.

**E. B. Treat and Co.,** New York.

*Diseases of the Stomach and Intestines.* Reed.

**A. S. Barnes and Co.,** New York, 1904.

*Beauty Through Hygiene,* by Dr. Emma E. Walker.

### Miscellaneous.

*Official Bulletin of the XV International Congress of Medicine at Lisbon.*

*Tennessee State Medical Association Transactions,* 1904.

*Louisiana State Medical Society Transactions,* 1903.

*Reports of the Board of Health for the Philippine Islands and City of Manila for April and May,* 1904.

## Reprints.

---

*Passenger Car Ventilation System of the Pennsylvania R. R. Co.,* by Dr. Charles B. Dudley, Ph. D. Chemist.

*Surgical Treatment of Chronic Dysentery; Uretero-Cystostomy; Fractures Into and About the Elbow Joint; Strangulated Femoral Hernia Containing Appendix,* by Dr. J. Henry Barbat.

*Treatment of Fibroid Tumors of Uterus; Some of the More Unusual Results of Movable Kidney; Report of a Case of a Fibromyoma of the Uterus by an Adenocarcinoma, which by Metaplasia had Assumed the Appearance of a Squamous Cell Carcinoma; Observations Upon Gastric Intestinal and Liver Surgery in the German Clinics; Personal Experience in Operations Upon Diabetic Patients,* by Dr. Charles P. Noble.

*A Theory of the Sympton Reflex,* by Dr. T. Horace Evans.

*Indicators in Gastric Analysis; With Special Reference to Tropeolinoo; A new method of Gastric Proteolysis; Oesophageal Neurosis,* by Dr. A. L. Benedict.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)  
FOR SEPTEMBER, 1904.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	8	4	12
Intermittent Fever (Malarial Cachexia) .....	8	6	14
Small Pox.....			
Measles.....			
Scarlet Fever .....			
Whooping Cough.....	1	1	2
Diphtheria and Croup.....	1		1
Influenza.....			
Cholera Nostras .....			
Pyemia and Septicemia .....	1		1
Tuberculosis.....	44	49	93
Cancer.....	17	5	22
Rheumatism and Gout .....			
Diabetes .....	2		2
Alcoholism .....	5		5
Encephalitis and Meningitis.....	4		4
Locomotor Ataxia.....	1		1
Congestion, Hemorrhage and Softening of Brain.....	12	5	17
Paralysis .....	2		2
Convulsions of Infants .....	1	1	2
Other Diseases of Infancy .....	19	10	29
Tetanus.....	4	6	10
Other Nervous Diseases .....			
Heart Diseases.....	34	21	55
Bronchitis .....	2	3	5
Pneumonia and Broncho-Pneumonia.....	6	7	13
Other Respiratory Diseases.....	5	2	7
Ulcer of Stomach.....			
Other Diseases of the Stomach .....	2	1	3
Diarrhea, Dysentery and Enteritis.....	18	7	25
Hernia, Intestinal Obstruction.....	4		4
Cirrhosis of Liver.....	6	2	8
Other Diseases of the Liver .....	2		2
Simple Peritonitis .....	2	1	3
Appendicitis.....	4	1	5
Bright's Disease .....	20	17	37
Other Genito-Urinary Diseases.....	3	1	4
Puerperal Diseases .....	7	1	8
Senile Debility.....	12	7	19
Suicide .....	6	1	7
Injuries.....	20	15	35
All Other Causes.....	12	2	14
TOTAL.....	295	176	471

Still-born Children—White, 19; colored, 20; total, 39.

Population of City (estimated)—White, 233,000; colored, 84,000; total, 317,000.

Death Rate per 1000 per annum for Month—White, 15.19; colored, 25.14; total, 17.83.

## METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure ..... 30.04  
Mean temperature ..... 81.  
Total precipitation ..... 2.84 inches.  
Prevailing direction of wind, southeast.



# *New Orleans Medical and Surgical Journal.*

---

VOL. LVII.

DECEMBER, 1904.

No. 6.

---

## Original Article.

---

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints may be had at reasonable rates if a **Written** order for the same accompany the paper.]

---

### Puerperal Insanity.

By DR. E. M. HUMMEL, Asst. Physician La. State Insane Asylum, Jackson, La.

"I do not know of any event that can occur in a family, short of death, that is so great a shock to all who have to do with it as for a new-made mother of a first-born child to become suddenly maniacal and require to be sent to an asylum. And few things are more pleasant than to see the restoration of the mother back to all that makes her life worth living."—Clouston

This subject should be of much practical interest, as every practitioner occasionally encounters cases of at least mild mental alienation supervening upon delivery. The occurrence of mental symptoms during the puerperium most often indicates that there is something wrong with the body metabolism, and the condition usually amounts to disease or exhaustion processes which may be removed by treatment if the patient can be sustained long enough. Condition which, if, on the other hand, unexpected, are apt to bring about a hopeless state of chronicity as regards the brain symptoms, or result in death. Hence the importance of early and active treat-

ment. It is safe to say that instances are not infrequent of patients being treated on the expectant plan, the physician trusting to nature to right things as involution takes place. In this wise the main chance is lost. The treatment of this condition is anything but expectant. Scarcely any other form of insanity is dependent to such slight extent upon hereditary instability, so free from recurrence once recovery is established, and so curable. About 80 per cent. of all cases recover when treated properly and early. Every one of these patients relieved is a useful life saved or a mother rescued from residence in an insane hospital for the remaining days of her life.

That period during which the maternal organism is occupied in readapting itself from the exigencies of accommodating the child in utero to the necessities of maintaining itself in the ordinary non-pregnant condition and supplying food at the breast, we call the puerperium. It varies much in length, but averages about six weeks. Within this brief interval many radical events are crowded even under normal conditions. Starting with the blood and tissues in a state of deterioration during the latter stages of gestation, there comes exhaustion and loss of blood, the pangs of childbirth and attendant mental stress and moral shock; the reflex effect upon the brain of the violent and sudden changes in the reproductive organs; sudden diverting of the blood current; changing of the flow of vital force from the uterus to the mammæ; profound stirring of the emotional centers incident to the awakening of the maternal instinct, in the case of primiparæ something new in the life of the individual. These are some of the things that transpire naturally. If there be further added sepsis, additional exhaustion of distocia, post-partum hemorrhage, disorders of assimilation, etc., is it any wonder that the central nervous system sometimes goes down before so many buffets? One factor is worthy of further note: alienists are accustomed to regard those intervals in the life history of the organism wherein are evolved special nervous attributes as critical periods. Upon the birth of the child there is realized in its full intensity the most powerful affection we know of, the maternal passion. Evolution of this emotion is sufficient to greatly affect the mother's mentality, and it is a feasible assumption that the cerebral integrity is compromised to some extent by this circumstance, lending as it does, coloring to insanity manifested under these conditions. For one of the most constant features of

insanity at these periods is perversion of the characteristic undergoing change. Notice the almost constant antipathy of the mother for the offspring in puerperal insanity. Regarding hereditary instability as a basic cause, it may be observed that whereas some women do pass through these trials without suffering mental derangement, while others are less fortunate, the unavoidable inference is that lack of staunch nervous integrity determines in great measure where puerperal insanity will be encountered. Nevertheless to designate such obscure and remote disharmony as amounting to an insane diathesis is too radical. In its essence the disease might best be regarded as a symptom of nervous breakdown under great body and mental stress at a critical period.

It is unnecessary to attempt to recite all the mental symptoms manifested, as these may be of infinite variety, determined by the temperament and differing circumstances. The general complexion of these phenomena is, however, quite the same. Sometimes, though, the attack partakes of the nature of some form of insanity to which the patient is strongly predisposed. Krapelin cites a case of choreic insanity, occurring during the puerperium, in a patient who had previously sustained attacks of chorea under other circumstances, and who was regarded as strongly predisposed to this affection. Briefly, the course of mental symptoms displayed is about as follows: Complaining of insomnia and headache or exhibiting a certain listlessness, the patient suddenly becomes fidgety, peevish and restless; the eyes become glassy in appearance and give to the face a startling expression; there is complete loss of appetite; patient suddenly shows an unreasonable antipathy for the child, husband and relatives, becomes incoherent and disorientated, suffers from auditory and visionary hallucinations. The symptoms often progress in intensity until either a profound melancholia is developed or, what is more frequent, the patient goes off into a furious mania.

One of the wildest patients I ever saw was a puerperal case. In the presence of hyperpyrexia and danger of physical exhaustion it became necessary to confine this patient to bed and restrict her movements as far as possible. This was accomplished by applying the rest sheet. Thus secured she spent most of her time bouncing on the mattress springs, which was the only motion she could make. She shouted and talked in a most garrulous manner nearly incessantly when left alone. The same patient after a storm of mani-

acal violence most terribly severe, extending over a period of three months, through a tedious convalescence of four months more, interrupted by several relapses, made a good recovery, and is now at her home with her family. During over two months of her most profound mental reduction, there was complete paralysis of appetite, necessitating constant feeding with stomach and nasal tubes. In cases digressing that far the melancholic or maniacal display is the most salient feature of the insanity. Wild impulsive outbreaks might occur at any time, and considering the perversion of the maternal affection, suicidal and homicidal propensities so common, these fits might result disastrously if the proper precautions are not taken. Erotic tendencies are also frequently manifested. After a period varying from several weeks to a year or more, the mental condition gradually improves, excitement or depression passes off, coherence returns, and the patient makes a good recovery. Simultaneously there is a rapid gain in weight, most cases recover in 6 months. Unfavorable cases lapse into chronic insanity, or rapidly succumb from exhaustion.

As intimated before, the disease starts on the basis of metabolic disorder during the latter stages of gestation and immediately supervening upon delivery. The most urgent indication is to hasten removal of these causes. One of the most constant mental phenomena is complete loss of appetite and even antipathy for food. So important and necessary is the offsetting of this perversity on the part of the patient that proper feeding forms the basis of the most successful treatment in the majority of cases. It should be borne in mind that the paralysis of appetite is a mental symptom here, and the patient's inclinations in this respect are no index to the body needs or capacity to assimilate. Disorders of the gastro-intestinal tract are frequently found, but usually do not amount to more than simple diarrhea or obstinate constipation with heavily coated tongue. These respond to the usual medication. The digestive apparatus having been put in order, when patient refuses to take the proper amount of food, forcible feeding, with stomach or nasal tube, should be begun at once and kept up constantly until the sense of hunger returns. The guide to amount of food to be given is the patient's full assimilative capacity. It is best to feed no less often than four times daily, at four hour intervals. More food can thus be given, and it is surprising at times how much a patient who has starved for some time can as-



similate. In kind, the food should be nutritious and easily digested—milk, eggs, beef tea, broths—given heated to several degrees above the body temperature. Of these raw eggs and milk are the very best. After introducing large quantities of food it is a good idea to follow with one or two doses of compound digestive elixir or elixir of pepsin to assist the digestive function. Any other medication required may be given while the tube is introduced. The last daily feeding should come about 8 or 9 p. m., as thus given it will tend to induce a good night's sleep. A half to one ounce of whiskey will enhance this effect. I have seen good hypnotic effect from stomach full of hot milk alone. The securing of sound and, if possible, natural sleep is another important indication. In instituting soporific measures what is wanted is sleep without insult to the ganglionic centers. When the presence of hot food and a dose of alcohol in the stomach fail to induce sleep, from one to four, or half to two hours, in a hot pack or bath respectively, with ice-cap to head, should be tried. These are valuable and effective measures when skilfully administered. All such having failed we have to resort to hypnotic drugs. Those should be selected which have the least tendency to disorder assimilation or damage the cerebral cells. Paraldehyde is harmless, and is effective in mild excitement. Sulfonal is more powerful in its action but its effects are so tardy as to make it an inconvenient drug when immediate action is wanted. Trional is quicker but too fleeting in effect. I combine the two with good results. Fifteen grains each of sulfonal and trional given in hot milk at 8 p. m. will almost invariably insure a sound sleep throughout the night in the face of the wildest excitement, nor will there be any perceptible after effects on the following morning. Chloral hydrate and chloretone should be resorted to with reluctance, and morphin never. Drugs given in conjunction with above mentioned mechanical measures are more efficient in action and require smaller doses. Nutritional needs having been carefully supplied and sufficient rest for the cortical cells obtained we have met the most important indications within our reach and greatly enhanced the patient's chances of recovery. I need scarcely mention that septic infection of the uterus and lesions of the birth tract should receive appropriate surgical treatment. Other incidental ailments are to be met with customary measures. During convalescence tonic measures will hasten the return to health. At all times throughout treatment the emunctory

organs should be kept active to insure elimination from the blood of harmful products of the excessive katabolism going on just now.

Finally a word may be said regarding the management of the patient; during the height of the attack, especially with grave body disorder, the patient will have to be confined to bed. When tactful management has failed of this the rest sheet is the only resort. All weapons, instruments or articles of furniture with which patient might injure herself or others, should be removed from the room. The child must invariably be taken away and kept away until the mother's sanity is restored. The impulsive outbreaks of these patients come without warning, making them extremely dangerous during the height of their illness; even mild cases exhibit these tendencies quite often. A tactful and experienced nurse is invaluable; usually strangers can do more with the patient than relatives. Very much more can be accomplished in the way of proper treatment and management by experienced hands at the patient's home than would at first be imagined. Should, however, these be not obtainable, as is too often the case, immediate removal to an institution for the care of the insane becomes imperative. In severe and prolonged attacks this is always necessary. Again, the four great requisites are, early, careful, constant attention to nutrition and rest, good nursing, patience and time.

---

---

## Louisiana State Medical Society Proceedings.

---

[EDITED BY PUBLICATION COMMITTEE]

P. L. Thibaut, M. D. Chairman.

---

### **Acute Suppurative Osteomyelitis: The Importance of its Early Recognition and Treatment**

By J. F. ORCHSNER, M. D., New Orleans.

So much has been written on the subject of osteomyelitis in recent years, the subject has been so scientifically discussed from every viewpoint, that of pathology, diagnosis and treatment, individual experiences have been recorded, that I might hesitate to

present this subject before this body were it not for the fact that my experience of the past winter in my children's clinic convinces me that the disease is not understood as thoroughly as it should be, and even when the diagnosis has been established, some fear or hesitation exists as to the institution of radical remedial measures.

Moreover, this disease is one, the recognition of which is of prime importance to the general practitioner, for he first sees the case, and it is in the very early stages, the first 48 hours, in which appropriate treatment, surgical, has its greatest value and best results. Again, some authors would have us believe that the clinical picture is one comparatively easy of recognition, whereas the diagnosis is frequently beset with the greatest difficulty.

Nevertheless, the fact remains, corroborated by the palpable evidence of advanced chronic cases which we encounter in great numbers, that the acute condition was either not recognized, or if it was, not properly treated.

In this connection, I fear that our methods of clinical examination are often faulty; we are disposed to rest content with the diagnosis of a fever prevailing at the time. Desultory examinations are to be deprecated. In no class of patients is a thorough physical examination of more importance than in children, who are often unable to give us much, if any, assistance in the determination of an existing pathologic state. The cry of a child is rarely hysterical, but has a potent cause for a foundation; this cause must be diligently sought. The disease with which osteomyelitis has been most frequently confounded is acute articular rheumatism, and upon this point I shall take occasion to dwell more fully when speaking of diagnosis. The axiom that pus found should be evacuated finds no truer application than in this condition, where the peculiar anatomy of the medullary and cortical layers of bone permits of a ready extension of the infective process in the former and a barrier to Nature's efforts at ready evacuation in the latter.

Osteomyelitis is most frequently due to the staphylococcus pyogenes aureus, but may be produced by any of the pyogenic microorganisms; it is occasionally associated with or follows typhoid fever, and at other times it is due to a pneumococcic infection. Trauma and exposure to cold are undoubtedly exciting causes. A neglected or unrecognized case of osteomyelitis may be attended by any one of the following disastrous results: Death from pyemia or general sepsis, in which the disease is most probably mistaken

for typhoid fever—or if death does not supervene the loss of a limb or its severe mutilation.

Osteomyelitis occurs in varying degrees of intensity, from those mild cases, to which Tillmanus refers as terminating in "*restitutio ad integrum*," and the vague "growing pains," to those fearfully toxic cases which very probably suggested to Chassaignac the term "*typhus des membres*."

Illustrative of the former I will cite the following case, which I am now inclined to think was truly an osteomyelitis:

CASE 1. Birdie W., 17 years old, on or about the 20th of June, 1903, noticed a severe pain in her right wrist; history of chill and fever are indefinite, though she says she remembers having had a chill followed by fever for several days. She consulted a physician who treated her for rheumatism for two weeks, at the end of which time she consulted me. The lower end of the forearm, together with the wrist and hand, were very much swollen, painful and tender. Examination revealed the lower part of the ulna as the point of greatest tenderness. There were never any joints other than the wrist involved.

At the time of examination there were no constitutional symptoms and no fever. Some doubt existed as to the true diagnosis and in view of the existence of the condition for two or three weeks and the absence of constitutional symptoms, I decided to splint the forearm and hand, thereby insuring absolute rest. No decided improvement following, a radiograph was taken of each forearm, with a view of clearing up the diagnosis. The bones of both sides were symmetrical. Dry heat at 240 degrees, by means of the Betz apparatus, was applied daily, and the patient recovered in about six or eight weeks.

There is still an element of doubt in my mind as to the true diagnosis in this case, but I am declined to think it was osteomyelitis.

Illustrative of the cases of multiple foci with rapid bone destruction, I will cite the following:

CASE 2. Sidney S., 12 years old, to whom I was called incidentally while seeing another patient in the house, was taken sick in September, 1899, with a chill, followed by high fever. Temperature at time of examination was 105 degrees and the little fellow complained of severe pain over the inner malleolus of one side



and the outer malleolus of the other. A diagnosis of acute suppurative osteomyelitis was made and operation advised. A consultant bore out the advice. On the third day incisions were made over the points of greatest tenderness and the bones trephined and pus evacuated. Violent sepsis continued; the bones of the leg went on to rapid destruction. Notwithstanding timely and thorough repeated operations, metastasis developed in the right humerus, left femur and superior maxilla. After two years of hard treatment and its incidental worry the case went from observation.

In cases where the diagnosis has not been made in the very beginning, much can be accomplished in the saving of a useful member by timely operation when the diagnosis has been made.

#### DIAGNOSIS.

A classical case of acute osteomyelitis is ushered in with a chill, followed by high fever, symptoms characteristic of any infectious disease; again the chill may be vague and the fever gradual in onset. Coincident with these symptoms the patient complains of pain, usually in the diaphysis of one of the long bones, near the epiphyseal end, and really this is probably the only symptom, with its attendant phenomena, which will enable us to make a differential diagnosis. But little, if any, excuse can be offered for failure to detect this pain in one old enough to appreciate it or to complain of it in very young children and infants the cause of its cry must be cleared up by a thorough and systematic examination. Again, in those profound cases of toxemia simulating typhoid fever, the mental hebetude of the patient forbids of much assistance on his part, but even in these cases localized pressure would probably elicit sensitiveness. The pain, when the patient is able to describe it, is of an excruciating, boring and throbbing character. Superficial sensitiveness may be absent in the beginning, as are usually also the other evidences of inflammation, swelling, heat and redness. A distinction must here be drawn between pain and sensitiveness; the former is always present, the latter may be absent. Two important methods of determining the presence of deep-seated tenderness and pus are continued and deep pressure and bone percussion; the point of greatest tenderness usually corresponds to the location of the septic focus and directs us where to cut. There is loss of function of the limb, probably voluntary, the superficial veins are turgid, the leucocyte count is high, and X-ray

examination frequently shows some enlargement of bone and a more transparent spot at the point where pus exists.

With the rupture of pus through the compact layer of bone and diffusion beneath the periosteum the pain subsides and we usually have the characteristic redness, heat and swelling. Frequently there is associated a sympathetic effusion in the neighboring joint, non-infectious, and Berg (*Medical Record*, Jan. 10, 1903) says of this "that acute pyogenic diseases of bones in the neighborhood of joints frequently give their first manifestations by an exudate in the respective joints. No acute joint lesion should be looked upon as rheumatic or gouty until an acute inflammation of the bones entering into the formation of the joint has been positively excluded. Especially in children is this most important, for in them rheumatism is relatively infrequent, while acute osteomyelitis is quite often met with." Given, therefore, a case with a chill, followed by high fever and acute pain in the end of one of the long bones, osteomyelitis should be given most weighty consideration. From typhoid fever, with which osteomyelitis seems frequently to be confused, there should be but little difficulty of differentiation. The onset is usually different and if the case is old enough the Widal test should clear up the diagnosis. It is only in those profound septic cases, with delirium and other septic symptoms, that any confusion might exist.

Tuberculosis and syphilitic bone diseases are more insidious and run a chronic course. Tuberculosis begins in the epiphysis—osteomyelitis in diaphysis. Syphilitic perichondritis and osteitis in infants frequently offer a most difficult problem for solution. Other manifestations of syphilis, etc., should be diligently sought for and a thorough diagnosis made. Periostitis, as a primary disease, is very rare, and when it does occur swelling is at once present. This is not the case with osteomyelitis.

Rheumatism is probably *the* disease with which osteomyelitis is most frequently confounded, and De Forest Willard, referring to it as that "bane of progressive medicine," remarks, "if we could strike the term rheumatism out of the surgical world it would be a blessing."

Rheumatism is essentially a disease of the joint, and despite the fact that joint affections are sometimes present in osteomyelitis, the degree of greatest sensitiveness would be in the joint and not in the diaphysis of the bone near its epiphyseal end, as it is in

osteomyelitis. In rheumatism the joint swelling is usually found earlier than in osteomyelitis.

Rheumatism is essentially a polyarticular affection, different joints becoming simultaneously or rapidly successively involved.

The monarthrititis of gonorrhea is cleared up by the history and bacteriological examination.

#### TREATMENT.

The treatment of acute osteomyelitis, aside from those cases with ill-defined symptoms to which Tillmanus refers as tending to spontaneous recovery, permits of no question. Dilatory tactics should not be adopted. The treatment is surgical and surgical measures must be instituted as soon as the diagnosis is made. The point of greatest tenderness is chosen, an incision under general anesthesia made down to the bone and that trephined. With the escape of pus the opening in the bone should be enlarged with rongeur forceps or chisel, until the whole infected area is exposed. According to Nichols, the wound should not be curetted, as thereby the integrity of the endosteum, so essential to subsequent repair, is destroyed.

As nature usually forms a barrier at the epiphyseal line at the end of the bone, we should be careful not to injure that. The effusion in the joint, when that exists, is usually of a non-infectious character, and we must be careful not to carry our drastic measures too far and open the joint.

The caption of this paper, as well as its object does not permit of the discussion of the subsequent methods of treatment of necrosed bone, and the reader is referred to the excellent article by Dr. Edward H. Nichols, of Boston, read before the surgical section of the American Medical Association, 1903 meeting, and published in full in the Transactions of that section.

The results of early operative interference have been well summed up by Senn as follows:

1. It removes pain.
2. It enables the surgeon to remove the local cause of the disease completely or in part.
3. It prevents extensive necrosis.
4. It is the best prophylactic measure against fatal septicemia or pyemia.

5. It prevents extensive destruction of the periosteum and other contiguous soft parts.

6. It cuts short the attack and expedites recovery.

The following brief histories of four cases, taken from a series occurring in our hospital service during the past winter, will serve to convey an idea of the preventable ravages of this disease:

CASE 1—Female; age, 13 years.

Two or three years ago patient fell to the ground while running, on the third day following which accident she began to complain of pain in the left leg. Shortly thereafter the limb became swollen and cyanosed and extremely tender and painful and there was coincident fever and slight prostration. No history of chills. Six days after the onset of left leg symptoms the right knee became very painful and slightly swollen, the pain and swelling increasing rapidly. The case was diagnosed as rheumatism and treated as such, without effect. In two weeks another physician was consulted, who opened the left leg and evacuated a large quantity of pus. Six months later the knee was scooped, and two months after that the bone in the left leg.

Upon admission to the hospital the left leg showed many old cicatrices, but no sinuses. The right knee joint was enlarged and fusiform, several sinuses were present over the lower extremity of femur, and the joint was very sensitive. The lower end of the femur was very much enlarged.

*Operation:* A semilunar incision beneath the patella revealed an edematous joint, with several necrotic foci, femur disintegrated and limb beyond redemption, so a thigh amputation was done. Pus continued to discharge from the medullary cavity of the femur. The general condition of the patient did not improve, so finally a hip-joint amputation was done, followed in due time by recovery.

CASE 2—Female, 7 years of age, while getting a pitcher of water fell on her elbow; arm swelled three days afterwards; no chill; no fever. Eight days after she fell, she saw a doctor, who poulticed the elbow with flaxseed. As soon as the arm was "soft" it was opened and this was done repeatedly during one year, seven times.

At the time of admission the arm, forearm and ulna were very much enlarged and riddled with sinuses. A subperiosteal elbow excision, together with the removal of about two-thirds of the



humerus and the upper third of the radius and ulna was done. Parenthetically, this case illustrates the value of conservative surgery at proper times, as the ultimate prosthetic and functional result justified the procedure here adopted, rather than amputation, was given due pre-operative consideration.

CASE 3.—Female, 3 1-2 years old. Got up in the morning complaining of tenderness in the middle of her ankles, caused either by a twist or exposure to cold dampness, which seemed to increase as the day wore on. Slept well enough that night. Complained the same way next day, but fever increased by evening. Was restless all night and kept her foot stretched out right stiff. On the third day the ankle was the same in appearance, but pains increased, with fever at  $102^{\circ}$ . On the fourth day the ankle started to swell, and had an ugly bluish yellow color, as if bruised. On the fifth day the pains and swelling increased, with fever at  $104^{\circ}$  and on the ninth day the whole of the leg was swollen as far up as the abdomen, three times its natural size. After the ninth day she seemed to suffer less and on the fourteenth day the leg was opened and a great quantity of pus let out. Immediately, the swelling subsided, leaving the leg about half as large as it had been at the time of the greatest swelling. On the eleventh day following operation, leg became again considerably swollen and incisions were made and drainage tube inserted.

The above is the verbatim history given by the mother.

At time of admission, six weeks after the acute onset of the disease, the leg presented several typhoid sinus evidences of necrosed bone and at operation the whole of the tibia, with the exception of the epiphyseal side, was found thoroughly disintegrated.

CASE 4—Female, 4 years old, is illustrative of a proper early diagnosis, but improper surgical therapeusis. This little girl, six weeks before admission to the Hospital, complained of pain in the right thigh, extending from the junction of the middle and lower third to the knee; the pain was severe enough to make her cry. There was no fever at that time. She walked with difficulty on the first day and not at all on the next two days. A physician was summoned on the third day following the onset of the disease; though he made a proper diagnosis, ordered flaxseed poultice and a liniment; a second physician, called a week later, treated the case as "inflammatory rheumatism."

Upon admission, six weeks after onset of disease, the thigh was

very much swollen and an incision over outer aspect revealed an extensive cortical femoral abscess.

The above cases are reported with a greater history than operative detail because, as previously stated, the object of their record in this paper is to elicit points of diagnosis. In all they are as nearly from the points as proper grammar and rhetoric permit, hence the connective factors must be taken for what they are worth, but they all clearly indicate a picture of acute osteomyelitis at the time of primary invasion.

In conclusion, I desire to thank my interne, Dr. Espy M. Williams, for the notes in these cases.

#### DISCUSSION.

DR. F. A. LARUE, of New Orleans: You must recognize these cases early if you expect to do any good. I have had two cases which show how much harm will come from not recognizing them early. The first was a child of 18 months who had an impetigo. The child fell, striking on the arm and shortly after complained of pain in the arm. A physician was called in and said there was a contusion. Finally another lump developed on the right radius and another on the ulna. The child was brought to the city and I saw the case and advised it being sent to the Sanitarium. With the assistance of Dr. Martin I operated on the left humerus and found quite a shell of bone which had broken down and resected 1 1-2 inches of the humerus. The child recovered with good bone fenestrum. The other case I saw was that of a boy with osteomyelitis of the humerus. I did not know how to account for the origin of the disease. He was seen by a local physician and brought here several weeks after the swelling set in. The swelling was at the elbow and from the history I diagnosed osteomyelitis. I did not want to perform amputation although I was inclined to do so so thought best to do a conservative operation and resected part of the humerus and elbow. The boy went home but fortunately came back several weeks after with several sinuses along the arm. Then the question was what to do—whether to amputate at the shoulder joint which might seem a too radical operation for an apparently simple trouble, so I told the family I would explore the arm and if I found I could save it I would do so. The parent said “amputate the arm at the shoulder joint and I will not have to pay so much doctor’s bills,”

but I refused to do anything of the kind. I explored the arm to the elbow and found the whole humerus simply a shell from top to bottom, absolutely useless and the only thing to do was to take the bone out so I removed the entire humerus and made a subperiosteal dissection, then packed and sewed it up and let it heal. He now has a good arm, though he has no bone from the shoulder to the elbow. There is naturally some shortening, but the limb is better than no limb and even more serviceable than an artificial limb.

DR. E. D. MARTIN, of New Orleans: I simply want to emphasize the point brought out, that is early diagnosis in these cases. There is no condition where we are so prone to make a diagnosis of rheumatism instead of osteomyelitis and it is the usual thing when the condition is in the long bones or deep-seated. The diagnosis can always be confirmed without interfering with operation by using a small trephine and drilling and it is remarkable to see how quickly these cases yield to treatment. I have had several cases which I diagnosed in the early stages from the symptoms and found not more than 1-2 dram of pus. One case had been diagnosed rheumatism, both the radius and ulna involved. Trephining revealed pus in both bones; the result was excellent, the patient now being in good health. The ravages of this disease if allowed to go on are terrible. I recall a case where I had to disarticulate the shoulder. Therefore, I want to impress upon you the importance of early diagnosis. Where you have pain on percussion or pressure, usually in the long bones, you should be very guarded in the diagnosis and if there is any doubt you can confirm the diagnosis by exploring.

DR. JULES LAZARD, of New Orleans: This is one of the most important papers of this session and the subject is extremely interesting from any point of view. It is a subject of which the general practitioner or the general surgeon cannot know too much. I want to point out that it is not only the country doctor who makes mistakes, but the city physician as well. I remember distinctly in my early student days that a friend of mine complained of pain about the ankle and he sent for three physicians at different times who diagnosed the case rheumatism. The pain was of a persistent character and as bad at night as in the day. The physicians advised that he go to Hot Springs, which he did, and got a diagnosis of syphilis of the ankle. He came home and

sent for a surgeon of high repute who diagnosed the case osteomyelitis at the lower end of the tibia and treated him accordingly. Any case of rheumatism that does not yield to salicylates ought to be regarded with suspicion if the pain is not the joint proper. In osteomyelitis the pain may be near the joint but not in it. If we wait long enough, which should be avoided, we will find the muscles, fascia and skin become matted together. If there is any doubt about the diagnosis we should explore the bone just as we explore any other cavity.

DR. L. G. LEBEUF, of New Orleans: Last year I saw a case in a boy. After two examinations for Eberth's bacillus and after consultation with Dr. Martin, we opened an abscess about the ankle. The boy did fairly well, but still had pain and we agreed that the condition was a disease of the bone. Dr. Parham was called in and dissected the whole of the tibial bone, leaving the smallest bit of a gutter. The head of the femur was also resected. The boy now walks around very well.

DR. R. M. VAN WART, of New Orleans: Dr. Oechsner has called attention to the fact that many of these cases are called rheumatism. It is not only in connection with osteomyelitis that this term is used to explain the pain present. Recent work has shown that it has very limited application, many of the cases being arthritis deformans. We read of mistakes in many other branches and many cases come to us after being treated for some time for rheumatism which a careful examination shows to be something else. Another condition often mistaken for rheumatism is the lightning pain of tabes dorsalis. It is astonishing how frequently the neurologist sees cases of this disease so diagnosed. It would be well if we could dispense with the term except in a special limited sense in connection with acute rheumatism.

DR. S. M. D. CLARK, of New Orleans: After trephining we should not curette and break down the barrier which nature has established for the limitation of infection. I think it is in a large measure similar to the recent views on infection of the uterine cavity in which instance nature establishes a wall of granulation tissue and we go in with a curette and break down the barrier which we are prone to do in manipulating, and by so doing open up avenues for infection, especially in those cases where the trouble is near the joint which may easily become infected also. Another point is in relieving tension. It seems to me that nature's



power of resistance is increased by simply relieving the tension by drainage.

DR. OECHSNER, in closing: I want to thank you for the general discussion of the paper. Dr. Lazard spoke of chronic cases, but my object was to bring before the Society the subject of acute osteomyelitis so that we should have no chronic cases. I will merely say this in reference to the suggestion I made relative to the treatment of subacute and chronic cases, that our methods of the past in removing a limited quantity of diseased bone, are now, in view of the conclusive experiments by Dr. E. H. Nichols, of Boston, inadequate and not as promising as the results of the method he suggests. In those cases which have gone beyond the pale of immediate relief, in other words, have passed the acute stage, and resulting in a greater or lesser bone necrosis, we should wait until the periosteum has thrown out its osteophytes. This usually occurs from 4 to 6 weeks after the primary onset, and is determined by microscopical examination of several sections of the periosteum, or roughly by thrusting a needle through the member down to the bone; a gritty feeling is imparted as the needle traverses the periosteum. When the periosteum is in such a condition, the case is ripe for operation, which consists in the removal of the entire diameter of the bone, throughout its diseased area. The two layers of periosteum are now brought together by buried sutures, and a periosteal column formed the osteogenetic power of which is such as to generate bone frequently as good as the original.

Regarding the matter of conservative surgery, that is also foreign to this paper, but I hope to incorporate a record of cases in another paper.

In regard to Dr. LeBeuf's remarks, it is unfortunate that we should not always look for an injury or for a history of catching cold. An osteomyelitis might develop (call it idiopathic if you will) without any trauma. The case to which I referred this morning had no trauma, so we should not always look for trauma. Again so far as the history is concerned, we know that from ignorant and illiterate people we can secure any history we desire so that now I usually let the patient give me the history without leading up to it.

In regard to Dr. LeBeuf's remarks, it is unfortunate that we cannot always tell whether the whole bone should be removed. In

the case to which he referred, the removal of the head of the femur with a prt of the shaft looked to me very radical, but the result showed that it was good practice.

I agree with Dr. Clark that Nature is our best friend, but she is sometimes overwhelmed and she then calls for assistance, though of course that is not applicable to his remark about the barriers formed and with which idea I fully agree.

---

### **Some Remarks on the Treatment of Club Foot by the Method of Lorenz. Report of Cases.**

By J. M. BATCHELOR, M. D., New Orleans.

Since the visit of the Austrian Surgeon, Lorenz, to this city and his marvelous demonstration of the possibilities of his bloodless method of club foot correction, and the astonishing degree of force that may safely be employed in the reduction of deformities, the older methods of gradual club-foot correction by means of mechanical appliances and by frequent applications of plaster bandages have been in a large measure, if not entirely, supplanted by what is called "forcible manual correction" applied at one sitting. It had been my intention to present this evening a series of lantern pictures showing the various degrees of club-foot deformities but, unfortunately, I have been unable to secure from the photographer the pictures I wanted in time for this paper. I have, therefore, selected three cases of club-foot of the equinovarus variety for illustration to-night, all of which cases were corrected by the Lorenz method of "modeling redressment." The results that I have obtained in a series of 23 cases of club-foot of this variety have convinced me of the superiority of the method of complete correction at one operation over the more tedious and long drawn out attempts at correction by means of braces and by frequent application of plaster bandage.

The scores of cases that had hopelessly dragged along for years under the old method of treatment in the hands of most capable men, without relief, that, since the advent of Lorenz and his demonstrations, have applied for relief, are adequate witnesses and ample proof of the inefficacy of the older treatment and the need for, and superiority of the method of forcible manual correction at one sitting. This method is applicable to the infant and to the adult, though when applying it in infancy we are deprived of a

certain element which contributes much to the immediate and permanent success of the operation. I refer to what might be called the weight bearing element. After complete reduction of club-foot deformities and the application of the cast the weight of the body transmitted to the elements of the foot contributes in a marked degree to the anatomical readjustment of the component parts of the foot and to functional restoration. The operation of modeling redressment of club-foot may be divided into three stages: first, that of correction of the outward deformity; second, the application and cutting of the cast, and lastly the supervisory or period of after treatment. It is not necessary here to enter into a description of the operation except to say that efforts at correction are directed against the component elements of the deformity in the order named: that of plantar flexion, adduction, extension and supination. It is important to note the necessity for the complete reduction of the varus, thereby reapposing the scaphoid and the cuboid bones in their proper relationship with the astragalus and os calcis, and of the astragalus in its intermalleolar relationship with the tibia and fibula, before correcting extension. I lay special stress on this for if correction of extension be attempted, which means the slipping back of the astragalus beneath the articulating ends of the tibia and fibula as well as pulling down the calcaneum, there is every possibility of fracturing the fibula. This occurred in my own experience, the foot not being sufficiently corrected in the deformity of adduction before attempting to correct the extension. I felt the fibula give way under my hand in the case of a boy 13 years old, with a most difficult equino varus deformity, and I was obliged to put the foot in plaster after an incomplete reduction and wait for the reunion of the fibula. This foot was subsequently properly and completely corrected. The application of the cast differs materially in method from that which we formerly employed, being applied without the addition of slush and so tightly as to completely constrict the member and threaten with gangrene unless the subsequent steps of the operation are carefully carried out.

The cutting of the cast requires the nicest discretion. The longitudinal fenestrum must extend completely through the cast, through the plaster bandage and batting to the skin, not leaving a single strand of interposing bandage fibres or batting unsevered. Whether the cast should be cut from extremity to extremity must depend entirely upon the case under operation; in some cases it is

necessary to divide both the circular strips at the instep and at the upper extremity of the cast before the circulation is completely re-established; in other cases this is not necessary and the surgeon must be guided entirely by the condition of the toes at the time of the cutting of the fenestrum. It is important that the cast should be cut well below the bony tuberosities at the knee joint, the object being to permit transmission of the body weight along the leg through the cast to the foot. The after treatment of these cases is a matter requiring constant supervision. Time is required for muscle balance to be established, and, to contribute to this resumption of muscle tonicity massage, electricity and a properly constructed shoe should always be employed. The patient should be instructed to practice voluntary abduction. This restores functional ability in the foot. To prevent possible return of equinus and inversion a shoe with a wedge shaped sole, the apex of the wedge on the inner side of the sole, and a brace with a step joint at the ankle permitting complete flexion of the foot and preventing extension beyond a right angle, are recommended by Lorenz. The cast should be worn uninterruptedly six months. A flat heeled shoe specially made fits over the cast and prevents wearing.

CASE 1.—Boy, age 5 years. Double congenital talipes equinovarus of pronounced degree. The mother had made attempts since infancy to correct deformity of one foot by normal stretching and massage with some success. She had selected the foot in which the deformity was less pronounced.

Operation.—Chloroform. May 11, 1903; cast removed September 19.

CASE 2.—Boy, age 7 years. Double congenital talipes equinovarus—marked—treatment by braces and tenotomy. No improvement. Could not stand without shoes and braces.

Operation.—Chloroform, 2 hours and 20 minutes, November 17, 1903. Cast removed March 20, 1904, after 4 months.

CASE 3.—Newsboy, age 13. Neglected double talipes equinovarus of extreme type. Operated left leg October 6; removed October 31; reapplied November 24, 1903; removed May 7, 1904; time first operation, 1 hour, 30 minutes.

Right foot operated November 9, fracture of fibula and incomplete reduction; cast removed by mistake January 4; reapplied March 14.



**Extra-Uterine Pregnancy: Its Diagnosis. Report of Cases.**

By ISAAC IVAN LEMANN, M. D., New Orleans.

A mere casual dipping into the contemporary literature will serve to convince that ectopic gestations are not of so uncommon occurrence as is the general impression. It is difficult, however, to obtain accurate data as to its frequency and the meagre statistical facts occasionally furnished differ widely. Douglas, for instance, quotes Bandl as saying that extra-uterine pregnancy occurred once in every twelve thousand pregnancies, while Price found it to occur eighty-three times in eight thousand pregnancies. Douglas' own work for fifteen years approximated four cases annually. Williams says that prior to 1876 extra-uterine pregnancy was considered so rare an affection that Henning stated that even the directors of large obstetrical institutions might never encounter a case and Perry was able to collect only 500 instances from the entire literature. It was only with the gradual development of abdominal surgery that its relative frequency became recognized. Schrenck, in 1892, collected 610 cases, which had been reported in the preceding five years and recently many operators have placed on record large series, Kustner having operated upon 105 cases in the course of five years, while Noble encountered extra-uterine pregnancy in three to four per cent of all his laparotomies. Vineberg reports nine cases that came under his observation in the course of one summer. In a clinic averaging over six hundred gynecological cases a year, it has been my fortune to see three cases of ectopic gestation this past year.

It is doubtful, to say the least, whether it would be possible from the tabulated experiences of one man or set of men to obtain a true idea of the frequency of the condition, owing to the failure on the part of the profession in general to recognize it. As Vineberg has well said: "The affection has not met with the same alertness on the part of the profession that appendicitis, for instance, has for some years past." When that same attitude of alertness, of suspicion towards obscure and hitherto little understood menstrual irregularities and pelvic pains shall prevail, we shall find, as I think we begin already to find, the recorded number of ectopic gestations increasing.

This, then, is the keynote to strike in the matter of diagnosis:

Do not expect to exclude extra-uterine pregnancy by reason of a failure to observe what has been set down as classical symptoms pathognomonic of the disease. There is no symptom, no symptom group upon which we may rely to establish the diagnosis. The frame of mind I had fallen into, confirmed as it has been by the recorded experiences of a number of operators during the past year, is well expressed in the first of the axioms laid down by Grandin (*Amer. Gyn.*, Jan. 1903): I. "Any woman, whether married or single, during the period of sexual activity, may be subject to this malignant disease."

The importance of this attitude of suspicion is more borne in upon us in reading the history of Vineberg's nine consecutive cases in but two of which was the classical picture of the disease present.

With this idea then well fixed in the mind, we may enumerate briefly the symptoms usually laid as leading to the diagnosis of ectopic gestation and consider the question of differential diagnosis. The history of amenorrhea for a month or two accompanied by the usual signs of a normal pregnancy, occurring in a woman previously sterile for a number of years; this amenorrhea being followed by a period of irregular, intermittent bleeding from the genitals, the discharge of a decidua from the uterus, and occurrence of occasional severe colicky pains in the lower abdomen, would lead one to the diagnosis of extra-uterine pregnancy and if upon vaginal examination we should find the uterus slightly enlarged, though not to the size proper to an intra-uterine pregnancy of the period indicated by the history, and further if we should find to one side a fluctuating boggy mass pushing the uterus over to the other side, we should have present all the possible evidence in favor of our diagnosis, when shortly after such an examination we find our patient in a state of collapse, with all the clinical manifestations of internal active hemorrhage, we have been further confirmed in our opinion by the occurrence of intra-peritoneal rupture. But it is precisely these clean-cut, unmistakable cases that are of rare occurrence. We must remember in the first place that the symptoms of rupture may be the first to direct our attention to the possibility of the existence of any serious intra-abdominal condition, in fact the woman herself may not previously have been aware of anything amiss. In the presence of such a state of affairs, of course, the question of differential

diagnosis is of minor importance, indications for celiotomy being the same no matter what the cause of the intra-peritoneal hemorrhage, whether from tubal rupture or from gastric ulcer or what not. In such cases to arrive at a proximate diagnosis we should have to rely upon the previous history in the main. Pelvic examination would yield but little information, the mass, if it had existed, having ruptured and the blood being free in the abdomen.

The history of irregular bleeding following an amenorrhea in a woman presumably pregnant but who has been previously sterile for a number of years leads directly to the consideration of what is probably the most interesting point in the differential diagnosis from early intra-uterine abortion. It will be impossible from the woman's story often, in fact usually, to determine the difference between the early abortion and the decidual cast of extra-uterine pregnancy. Both conditions may give rise to a more or less continued or intermittent hemorrhage. In both conditions the uterus may be slightly enlarged. The fact that the patient has been previously sterile or is known to have been the victim of previous pelvic inflammatory trouble will not lend much weight to the side of tubal pregnancy, as against intra-uterine abortion, nor would the opposite history exclude the extra-uterine gestation. We may be helped by a history of recurrent pains, whether sharp and lancinating, or bearing, boring or dull and throbbing, more especially on account of one or more spells of faintness indicating repeated partial ruptures. But of greatest importance is the vaginal examination, for herein lies the moral of the whole lesson. We must not content ourselves with the probable diagnosis of early abortion when presented with a history such as I have tried to outline, but should make careful pelvic examinations, always, of course, with due precautions of cleanliness, and determine for ourselves the true state of affairs. Remember that we may have no pains, no signs of rupture and remember that it is just in this quiescent state that we hope to be of the greatest assistance. A woman, then, menstruating irregularly, intermittently after a period of amenorrhea or even after a slight delay in the menses, no period having been skipped, may not be aborting. She may be the victim of a tubal pregnancy. Bear always in mind this suspicion and do not let the presence of bleeding be a reason for a failure to examine. Even upon examination we may find the diagnosis still problematic. If we find a fluctuating mass in the broad ligament

to one side we are justified in the fear of such a history to make a diagnosis.

ILLUSTRATIVE CASE No 1.—Lizzie Bolden, colored, age 26. Admitted to the Charity Hospital September 27, 1903. Well nourished. Puberty established at 16. Three children. Oldest nine years, youngest one and a half years old. One miscarriage five years ago. Has had pains in both groins and back ever since this miscarriage. Previous to two months ago menstruation was perfectly regular, lasting three days at each period. Had not missed a month, but for past two months has been bleeding intermittently for a day or two at a time. Vaginal examination revealed a small fluctuating tumor about an inch and a half in diameter to the right of the uterus. Tumor was freely movable and stood in the same relation to the uterus as the tube would. The right ovary was easily palpated and found normal. Left adnexa normal. Uterus normal in size. Patient gave a history of having passed a decidual cast. Here the history of the patient alone would have led us rather to the diagnosis of very early abortion or of hemorrhagic endometritis. Pelvic examination enabled us to localize the trouble in the tube, but left us in doubt as to the precise nature of the tubal trouble. Salpingitis might very well accord with the history and account for the uterine hemorrhage. However, the tube was freely movable and the ovary was normal in size and mobility—all presumptive evidence against inflammatory trouble. Armed with the suspicion on which I have endeavored to lay stress, I ventured upon a probable diagnosis of extra-uterine tubal gestation. Whether tubal gestation or salpingitis with that amount of fluid accumulation within the tube the condition called for operative interference. Upon opening the abdomen, October 1, 1903, I found the right tube distended to the size already mentioned, adherent to a coil of intestine not easily separated. After ablation the tube was opened and found to contain a fetus of about six weeks. Patient made an uneventful recovery.

This case is reported not in order to demonstrate the ease with which the diagnosis is made when we are on the *qui vive* for the condition, but rather to demonstrate how difficult it is and how necessary is a careful investigation into these cases presenting a history of this character. Just here I may remark upon the relative safety of an exploratory laparotomy as contrasted with the



very great danger of a curettage in such cases as this. I would not counsel rash invasion of the peritoneum, but exploratory laparotomy should be an operation without mortality. On the other hand what must have been in such a case as this the calamitous consequence of a curettage, that operation so simple and supposedly so devoid of risk, undertaken for the cure of a supposed endometritis, possibly dependent upon the salpingitis! Unavoidable rupture of the pregnant tube, internal hemorrhage and death of the woman.

From normal pregnancy there should be no difficulty in differentiating the abnormal gestation. The soft fluctuating body of the uterus plainly continuous with the cervix can hardly be confused with the tube. Small ovarian cysts with torsion of the pedicle may simulate ectopic gestation in symptoms both subjective and objective. Douglas points out that the points of difference here would be: 1. Signs of pregnancy; 2. Amenorrhea; 3. Passing of decidual membrane in the history of an ectopic, while upon an examination we should find the uterus either drawn over to the same side by the taut pedicle of the cyst. That organ would be displaced invariably to the opposite side by the pregnant tube.

But not only in the early (unruptured) stage is the diagnosis of ectopic gestation difficult. Even when the pregnancy has continued to term and the patient has withstood the, it may be, repeated ruptures of the gestation sac with limited hemorrhage and the dangers of missed labor and even come into the depths of sepsis—even then is the diagnosis obscure and perhaps impossible. I may best indicate this to you by the relation of

CASE No. 2.—Ollie Wilson, colored, age 29. Admitted to Charity Hospital April 14, 1903. Personal history: Began to menstruate at 13. Regular periods 4 to 5 days, slightly painful. One child 3 years ago. No miscarriages. Present illness began eleven months before admission. Pains in hypogastrium, violent, attended with vomiting and prostration severe enough to cause patient to go to bed for some time. Since that time has noticed gradual development of tumor in hypogastrium. Has had severe attack of vomiting and severe abdominal pains. Menstruates regularly, but periods last from seven to nine days. No history of menstrual cessation prior to above symptoms. Occasional chills followed by fever. Fever often without chills preceding it.

*Status presens:* Septic appearance marked; septic temperature. Tumor soft and fluctuating, filling hypogastric zone and rising midway between umbilicus and ensiform cartilage. Extremely painful and tender. Chill 24 hours after admission. Vomits persistently since that time. Pulse hard and rapid, without sustained volume. Vaginal examination shows tumor apparently connected directly to uterus. Difficult to accurately define limits of tumor owing to pain. Cervix hard; os small. Adnexa not palpable. Condition is one of a suppurating encysted collection. History is suggestive of extra-uterine pregnancy. Probable diagnosis prior to operation: Suppurating ovarian or dermoid cyst.

*OPERATION:* Upon opening the abdomen, a large fluctuating mass, adherent to intestines and in part to abdominal parietes above, presented itself through the incision. Aspiration showed this to contain a slightly greenish yellow non-purulent watery fluid. The cyst was incised and contents allowed egress. Posteriorly and a little to the left of this was another cyst, aspiration of which revealed the presence of a greenish, serous and slightly blood-streaked pus. Attempts to free the cyst from surrounding adhesions resulted in its rupture. It was found on exploration of its cavity, to contain fetus, apparently full term, showing conditions of beginning maceration. Placenta well formed. Fetus removed after ligation of cord. An acute exudative peritonitis was present involving the entire peritoneal surface, both parietal and visceral from pelvis to diaphragm. Exudate was removed with sponges and the abdomen and pelvis flushed with normal saline solution. No attempt was made to remove the placenta. Gauze drains were passed up to the diaphragm and down into the pelvis to those points indicating the severest local peritoneal infection, the end of these drains being brought out through the abdominal wound. This was sutured to the abdominal wall and the sac cavity was filled with iodoform gauze. The abdominal wound was partially closed with interrupted through and through silk worm suture.

Death eight hours after operation from post-operative shock and effects of toxemia prior to operation. No post-mortem.

This patient was profoundly septic upon admission and her very grave condition demanding immediate operative interference was plainly due to some collection of pus within the cyst. What the nature of that cyst originally was could not be made clear

without the operation urgently demanded for the relief of the condition. But while confessing one's inability to make this positive diagnosis at this stage, must not our thoughts necessarily come back to the question: Could not the diagnosis have been made earlier before the woman had become septic and when the chances for recovery would have been enormously increased? Was not the history of repeated pains and prostration with the progressive growth of a fluctuating tumor sufficient reasons months before to arouse the suspicion of the attending physician and to cause him even in the absence of a positive diagnosis to insist upon an exploratory operation and an inspection of the pelvic condition? Did not the history at least call for a careful bi-manual examination early in the disease and would not this have revealed the presence of what was then a small fluctuating tumor? This latter would have demanded surgical procedure.

I end as I began. I believe:

1st. This disease is a far more frequent one than most of us now believe it to be.

2nd. By maintaining an attitude of alertness and of carefully investigating all conditions of menstrual irregularities and colicky pains, we shall find ourselves warranted in establishing an accurate diagnosis and saving the lives of some patients who would otherwise perish.

3rd. That when the diagnosis is obscure in the presence of a boggy or fluctuating mass to either side of the uterus, we are justified in doing an exploratory operation either through the abdomen or the vaginal fornix.

---

## Society Proceedings.

---

### Orleans Parish Medical Society.

---

*President*, DR. M. J. MAGRUDER.

*Secretary*, DR. S. M. D. CLARK,

141 Elk Place, New Orleans.

In charge of the Publication Committee, DR. S. M. D. CLARK, Chairman,  
DRS. E. J. HUHNER and M. M. LOWE.

---

MEETING OF AUGUST 27, 1904.

DR. L. G. LEBEUF read a paper entitled

#### **A Clinical Report on Eclampsia with Treatment.**

Zweifel has well named this affection "the Disease of Theories" for since Lever first showed the presence of albumin in women suffering with this disorder there has been the greatest amount of discussion regarding its etiology and its successful treatment, so that, any method or line of treatment which can hold some little hope to the parturient woman must be welcomed gratefully. Few scenes, few tragedies are more horrible to witness than the bedside of an eclamptic convulsion. The accoucheur who has gone through that scene a few times becomes very grateful for any assistance which can be offered to him.

Though there is always, or nearly always present, some renal disturbance in eclampsia, such a small proportion of cases of nephritis seem to have convulsions that this factor in etiology is being relegated to second place of importance.

The report of one of my cases where there was no renal lesion would add proof to this contention.

Klebs, Jurgens, Pilliet, Schmorl and others brought out the peculiar condition of the liver in all fatal cases—hemorrhagic hepatitis, as they called it, or toxemia of the liver. Tarnier, Bouchard and Riviere have claimed in these later years that the entire condition was one of pure auto-intoxication caused by the presence of some as yet undetermined germ in the blood. A good many others have



held that the cause of this terrible affection lies in a fetal origin, as the same lesions found in the mother's liver, brain and kidneys were also found in the child's organs, in post-mortems made shortly after birth. Frequently also the new born has been seized with the same kind of convulsive seizures as the mothers.

The consensus of opinion today is that in the peculiar lowering of the normal nervous tension which appears always towards the end of the long nine months of gestation, there is present in the blood some poisonous substance which cannot be eliminated safely and rapidly enough, until it is too late and some necrotic or degenerative process has been allowed to set in and cause minute thromboses or other changes in the smaller blood-vessels of the brain, liver, kidneys or other organs. This auto-intoxication theory is affirmed considerably in my opinion by the marked improvement always resulting in most cases after free bloodletting and large rectal or subcutaneous infusions.

When this mooted question of pathology or etiology will be eventually determined we will have a much clearer sailing in adopting a regular method of procedure in treatment, and be able to save more cases. Until that date is reached we must necessarily proceed with our treatment according to the clinical experience we have gained by the bedside of the parturient. It is to report this method that I have chosen the subject of my experience during the last twelve months. It is not a new treatment—Williams in his text-book on Obstetrics advises it; many others have used it, also. In 1890 Dr. Frank Brickell, now deceased, read a very interesting report of twenty-two cases before the Louisiana State Medical Society, where practically the same treatment had been used. Our medical journals of recent dates are teeming with literature on this subject, and though most of them place a great deal of stress on hot normal salt solution, few elaborate enough on the administration and method of administration of morphin. During a good many years of a fair sized obstetrical practice, it has been my bad fortune to see a good many cases of this disease. Often also, in *accouchements forcés*, or in hard, dry labor, have witnessed a frequent condition brought on by intense efforts of *travail* or by acute pain; I mean a peculiar, fixed, glassy look of the parturient with a characteristic, tonic, stiffening of all the limbs—this, if allowed to continue, would probably be the precursor of a spasm. With quick

interference this can usually be checked, either by slapping the cheeks brusquely, rubbing the face and nose with *spt. ammonia*, *aromat.*, or whiskey, and when too severe, a hypodermic of morphin, gr.  $\frac{1}{4}$  or  $\frac{1}{8}$  may be given.

This condition is either caused by pain and its effect on the brain, or is possibly due to a temporary mechanical anemia, if I may be allowed to call it so, due to the severe straining and the profuse supply or excess of blood in the violently contracting uterine muscle or in the assisting accessory muscles of parturition, in this way diminishing the normal flow to the cranial cavity. Long before I became thoroughly familiarized and self reliant enough to use forceps as a prophylactic measure, I believe I saved a dozen women from eclampsia by the prompt administration of an anesthetic.

This report consists of five cases seen during the last thirteen months of practice, an unusually large number for me.

CASE I. July 18, 1903. That of Mrs. C. T., a white married woman, age 20, wife of a druggist whose husband was in the second stage of tuberculosis. A primipara who had reached full gestation without any discomfort, except in the last three or four days before confinement when she began suffering with severe epigastric pains, vomiting and some headache. A physician was called in then, and found some albumen 24 hours before labor; when labor came on he delivered her with forceps of a normal living child. A few minutes after labor she was seized with violent convulsions. I was then called in and helped to chloroform her and keep her in a profound anesthesia. Her pupils were dilated, pulse 152, resp. 50, temp. per axilla 104, pulse wiry. She was given pilocarpin, gr. 1-16, morph. sulph., gr.  $\frac{1}{4}$ ; but in a few minutes while in a profuse perspiration she again had a most violent convulsion which lasted twelve minutes; after this we had a great deal of trouble in reviving her—using high enemata of black coffee and a hypodermic of nitroglycerin., gr. 1-100; as pulse did not respond we decided to give her the benefit of an intravenous saline infusion. This was successfully performed by Dr. M. H. McGuire after some delay in finding a proper sized vein in the frightfully enlarged anasarcaous tissues of the arm. Patient rallied quite well after we had given her 42 oz. of normal salt sol. of temp. 112; pulse became 120, resp. 28, temp. 104 4-5. She regained consciousness and though she had had convulsions, two or three hours later thinking her much better we left her in charge of her attending physician. In

a few hours afterward when he himself had left her bedside for a few minutes, she was seized with a severe tonic convulsion—from which she lapsed in unconsciousness and never rallied from coma.

CASE 2. Jan. 5, 1904. Was that of Mrs. J. F. W., a primipara of 39 years of age in whom I had apprehended trouble on account of her age at the time of pregnancy and for that reason an extra amount of close watching was expended on her case. Urine was frequently analyzed. I had attempted two or three times to get a satisfactory measurement of her pelvic diameters—and though these examinations were not thoroughly successful they seemed to reveal a very roomy pelvis. Only one microscopic examination was made of the urine in the 9th month, but frequent chemical analyses with nothing abnormal except a persistent low spc. gravity. She was delivered on Jan. 5, of a normal 7½ pound female child, a vertex presentation, I forget the exact position, without any kind of difficulty. Placenta was also delivered within 10 minutes; no perineal tear, and as much as could be seen no cervical tear.

I believe that I was called to her at 2 a. m. that morning, and I was back to bed at 4. a. m. She made an uneventful recovery, getting up on her 10th day; she had only a scant supply of milk but still insisted to nurse her child. I interrupted my visits on the 12th day and on February 6, at 5 a. m., 31 days after labor, I was rung up from Johnson's stable, the neighboring telephone, in a most frantic manner, by her husband. I hurried to her house on Conery street to find my patient in a most severe clonic spasm, foaming at mouth, with tongue caught between her teeth. This had already lasted half hour and in spite of chloroform and ¼ gr. morph. sulph. administered hypodermatically, spasm lasted altogether one whole hour. I then kept deep chloroform anesthesia about two hours more. High rectal enemas of normal salt sol. were used and urine withdrawn, 2 oz., by catheter. This latter was thoroughly examined microscopically and showed only a few red blood cells—no casts, no albumen; all that day unconsciousness was kept up by morph. sulph., gr. ⅓ every three hours and next morning dulled consciousness returned with loss of vision for 24 hours more; in three days she had recovered entirely. Other treatment consisted in normal salt rectal douching with oz. 3, each of senna and digitalis leaves. Infusion used every three hours. Free calomel cath-

arsis on 3rd day. The history given of the onset of the spasm was that she had waked up to nurse the baby in the early morning light, and complained to her husband that she could not see her child; she became a little nervous and went off in this convulsion. Her urine increased quickly in amount and sp. gravity resumed normal marking, but at no time was there any abnormal factor in these examinations. Her previous history showed no history of epilepsy. No apoplexy.

This convulsive post partum seizure, which was undoubtedly eclamptic, took place 31 days after labor without any history of indigestion or constipation or any other cause which I could see.

CASE 3. Was one in which I assisted my confrere, Dr. D. L. Watson, and he has kindly consented to give us his valuable notes on the case. It was one of the most extreme cases I had ever witnessed, specially for the severity of all the symptoms—the night delivery, when we had almost in desperation to control the spasms, placed her on as a heroic doses of morph. sulph. and other anesthetics as we dared to, we both sat by her bedside and almost feared that we had overdone our treatment. Her breathing was stertorous, pupils contracted to a pin point, pulse quick and hard; respirations shallow and fast and still we felt that with the saline infusion and other cardiac stimulants that we were doing the only thing to prevent the return of the attacks. She made a complete recovery.

CASE 4. This showed some features of such marked interest that I want to beg your indulgence and report it at some length, as I had a very exact record kept by two nurses.

Mrs. Rene B., aged 24 years, a primipara whose father had died from consumption. She was to be confined by a midwife, so I was able to see her only a week before labor. I believe I was engaged because of the fear of her mother's in her immense size. Her urine was brought to my office one week before labor and examined only chemically and showed nothing abnormal. I saw her on June 5, on Sunday; she was very large, with feet and legs swollen. Digital examination at that time showed a head presentation. As she complained of a little headache, I asked for another specimen of urine, which was brought to me next day by her husband, at 4 p. m. This had 40% of moist albumen, sp. gr. 1010, granular and finely granular casts. I immediately placed her on a liquid diet with saline purgatives. That night at 12 m., I was called to her in a



great hurry telling me that she had lost her vision and gone in a convulsive attack. As I was five miles from her I immediately advised to get a neighboring physician until my arrival. This was done and in 30 minutes when I reached her she had had two convulsions already. After the last convulsion this physician left after prescribing a preparation of chloral and bromide. Five minutes after I had reached her bedside, while perfectly conscious, she suddenly went in another heavy clonic convulsion. Her tongue had already been severely bitten in the two preceding attacks, so I had to save it from further injury by holding the handle of a wooden salad spoon between her teeth.

This spasm lasted five minutes. She was chloroformed during the time it lasted until convulsive movements were arrested and she lapsed into coma. The anesthetic was then discontinued. Hot water bottles were packed all around her and a hot saline enema used. Then I began morph. sulph. gr.  $\frac{1}{4}$ , pilocarpin gr. 1-16 and nitroglycerin gr. 1-100 every two hours. Temperature per axilla 104 2-5, pulse 152, respiration 36; she soon broke out into a profuse sweat. No signs of labor as yet. Digital examination showed cervical canal still unobliterated, but external os soft and patulous. Whenever she seemed to regain return of consciousness I would immediately begin to push the chloroform again. She was catheterized also; 2 oz. of urine in bladder. As she was doing very well and two and a half hours had elapsed since the previous spasm I laid down on a sofa for a short rest. At 3 a. m., within half an hour I was called up again to find her in a most violent spasm.

This lasted five or six minutes, during which I again gave the chloroform. After the attack was over I repeated the morphin sulph., gr.  $\frac{1}{4}$ , and used also another hypodermic of pilocarpin with nitroglycerin; she began having a general edema of both lungs, so I had to discontinue the pilocarpin temporarily. Her pulse about 170 could hardly be counted, so I then determined to bring on labor. Another convulsion came half hour after this last, lasting three minutes. I began dilating the cervical canal with two fingers, using Harris' method and gradually slipping one finger at a time until the os was stretched enough to slip in the hand; by that time Dr. E. D. Martin, whom I had telephoned for to assist me, was able to keep her under enough anesthesia to allow me to apply forceps and I quickly delivered her of a large 9½ pound, stillborn, male

child. There was no perineal tear, and only a slight cervical. Placenta was delivered within five minutes, only slight loss of blood.

Shortly after completion of labor her uterus was well contracted; she had another convulsion which lasted about five minutes. Her condition became very bad after this convulsion; pulse became almost imperceptible, we stimulated her all we possibly could, and when she had revived some, we gave her again morph. s. gr.  $\frac{1}{4}$  with 30m. of brandy, gr. 1-100 of nitroglycerin, gr. 1-100 of digitalin. One hour after delivery she was seized with her last or seventh convulsion, by far the most severe she had had as yet—so hard was this that it shook her bed so as to partly demolish it, with the weight of four of us also to hold her in it. This lasted six or seven minutes and when she lapsed in coma, she was entirely cyanosed, pulseless, and remained without even a stertorous gasp for over one minute. Her heart could only be felt as a faint flutter. I rapidly straddled her chest with my knees and legs and began artificial respiration (Sylvester method), raising her arms away above the shoulders for inspiration and bringing them over to her sides compressing the lungs for expiration. Also rhythmically with this I had the nurse to pull the tongue down each time with my movements of respiration. This process was continued for over five minutes, before a spasmodic gasp returned. As the respiration was very jerky and irregular I still maintained this process for twenty minutes altogether, until respiration was well established. This is one of the most fatiguing experiences I have ever had. When I was through this exercise of continued twenty minutes of the regularly lifting of heavy arms and compressing her chest with them I was thoroughly exhausted. Hpo. of nitroglycerin, strych. and digitalis were again used. Also half pint of the strongest kind of coffee was thrown in the high colon. She remained unconscious all day; catheterized every three hours regularly of one or two oz. of urine only at a time. Normal salt enemas were also used with rectal tube every three hours. Morph. s. gr.  $\frac{1}{8}$ , digitalin gr. 1-100 every three hours. When she seemed to arouse the least a few whiffs of chloroform were used to keep her unconscious. That evening at 5 p. m. as she was still practically pulseless—pulse 172, resp. 46, temp. 103, we decided to infuse her. Dr. Martin who saw her again at that time, performing the operation. It was not entirely satisfactory and she did not appear to rally from that, so we

made a puncture with a knife under her right breast and shoved the needle under the breast and with a Davidson syringe injected slowly with frequent interruptions 22 oz. of normal salt sol. temperature of 108°; this seemed to help her considerably and in a few minutes her pulse became better.

Next day, June 7, she remained unconscious all day. Nitroglycerin gr. 1-100, digitalin gr. 1-100 every three hours, pilocarpin gr. 1-20 every four hours. Normal salt enemas with oz. three of inf. of digitalis every three hours. Hot coffee 16 oz; every six hours by enema.

June 8, began a teaspoonful of water by the mouth and gradually increased that to 2 oz. of water and milk every two hours. Temp. in axilla 102, resp. 40, pulse 144, catheterization of 24 hours, oz. 8. Morph. s. gr.  $\frac{1}{8}$  twice daily up to that evening. Stafford's water and vichy 2 oz. each by mouth every two hours; one teaspoonful of Ducro every two hours.

June 9, regained consciousness, though vision was still dull, absolutely no recollection of events, does not know that she has been delivered and is anxious about coming labor. June 9, barley water and a little chicken tea added to other diet. Swallows better; urine still bad. 10% albumen and granular casts. Infusion of senna and sulph. magn. used by enema and free catharsis established. Temp. 99 2-5, pulse 100, resp. 20. Strychnia now was used regularly with digitalis every four hours.

June 10, Voided urine herself, quantity in 24 hours, 24 oz. Has become perfectly conscious and sight much better. Lochia was checked entirely that day, and warm carbolized douches ordered twice daily.

June 11, Temp. 102; she had one or two chills and during the next four or five days was a very sick woman; suffering undoubtedly from a septicemic infection. Temperature ran up on June 18 to 106 1-5. Complete collapse following this from which she rallied with the greatest difficulty.

Whenever temperature rises she begins to cough incessantly. Lungs normal except some bronchial and mucous râles at base of left lung post. I washed out her uterus twice daily with plain normal salt water, sterilized, for three days to control height of fever; also five grains of thermol was used whenever fever rose above 103. Very little depression following this use.

On June 25, Temperature normal and patient was propped up in bed, convalescent; slight trace of albumen still; no casts, voiding 60 oz. of urine, per twenty-four hours.

On July 8, after she had been up a week, she sent for me and though there had been no evidence of any septic infection at the side of saline subcutaneous injection, I found some fluctuation under the breast and opened it by free incision; quite a large abscess. What influence this had upon her temperature I am not prepared to say, she has since recovered entirely and is now at Bay St. Louis.

CASE 5. While putting these notes together the other night, Monday, August 22, I was called from my writing desk by the husband of a patient I had delivered the previous night, August 21, at 11 p. m. of a 7 pound, male child, by breech presentation. He said that his wife was suffering from a severe pain in her head, had lost her vision and was nearly frantic. I dreaded what she was threatened with so much, that I asked him to call his neighboring physician at once, until I could dress and get to his house.

Mrs. J. W. S., age 35, a multipara whose youngest child was 14 years. During the two years' preceding this pregnancy there had been two miscarriages. This last pregnancy was uneventful, though she had been a little nervous once or twice. Her urine had been examined during the last three months about every two or three weeks and had always been found normal.

The last examination was made Friday, August 19, at 4 p. m., and was free of albumen. She was taken with irregular labor pains Sunday morning, August 21. But when I examined her first Sunday at 7 p. m. os was only slightly dilated. Waters broke at 10:30 that night and in three propulsive pains she was delivered by breech presentation, left sacroiliac I believe, but it was so quick and easily passed that there was not even any redness of presenting part. Patient did very well that night and all day Monday until 4 p. m.; she voided her urine three times herself, reported as normal quantity to me. At 4 p. m., Monday, she began complaining of being a little nervous and of suffering a little of her head. Pulse then 84, temp. 98 4-5, respiration normal, and the history of voiding the urine so well prevented my suspicion being aroused, so I merely ordered her to take bromide of ammonia 15 gr., and  $7\frac{1}{2}$  gr. of chloral every hour for three doses. After the second dose went into a peaceful sleep, she waked up from that at 10 p. m. in



the condition stated above. When I reached her bedside preceding Dr. Burthe 20 minutes, I found her in her third convulsion with head twisted on left shoulder, already saliva and foam running from her twitching mouth and in a violent clonic convulsion. I immediately chloroformed her and pushed the head of a clothes pin between her teeth so that I could save her tongue. When entirely chloroformed the spasm abated and then I gave her at 11:10 morph. sulph. gr.  $\frac{1}{4}$  and digitalin gr. 1-100, hypodermatically. In a few minutes she had her fourth convulsion lasting three minutes. Dr. L. Burthe reached the house by this time and we together pushed the chloroform still more. We also prepared a large hot normal saline rectal douche and as we had no rectal tube we took off the canula of the syringe and used the tube itself of the syringe as a rectal tube, introducing this over 20 inches in the rectum; during this proceeding she was taken with another convulsion. This fifth convulsion lasted over five minutes. We repeated the hypodermatic of morphin sulph. gr.  $\frac{1}{4}$ , digitalin gr. 1-100 and as she did not seem to improve, her pulse was then 160, resp. 48, temp. per axilla 104, we gave also nitroglycerin gr. 1-100. After this spasm I kept up the chloroform continually for one hour, and when she began showing a little cyanosis and pulse became bad again, I discontinued it, but sat by her bedside until 4 a. m. with the cone in hand so that I could give her a few whiffs, whenever she seemed to be regaining consciousness. If her fingers twitched, or her lips quivered, I would place the cone over her nose. After the fourth convulsion I had packed her with hot water bottles, eight of them, and covered her with woolen blankets so that within five minutes after the four pints of salt douche had been injected she had broken out in the most profuse perspiration, so that we were able to do without pilocarpin. And I was very glad of it on account of her lungs. At 3 p. m. I repeated the digitalin hypodermatically but gave her only gr.  $\frac{1}{8}$  morph. sulph. Pulse then 108, resp, 28, temp. per axilla 101 2-5. Treatment ordered kept up by trained nurse, was the same. Morph. gr.  $\frac{1}{8}$  and digitalin gr. 1-100 every three hours; normal salt enema, temp. of 110, two pints every three hours with rectal tube, and to watch the least sign of regaining consciousness, to use chloroform to prevent it.

This treatment was followed until August 24, at 7:30 a. m. when morphin was discontinued and nitroglycerin gr. 1-100 and digi-

talin gr. 1-100 continued hypodermatically. Fifteen grains of bromide with three oz. of inf. digitalis was continued in warm saline enemas until August 25. Urinalysis of first urine withdrawn from bladder after convulsions, showed 15% of albumen and all the casts possible. Only 8 oz. the first twenty-four hours; the next twenty-four hours 22 oz, on the third, say 62 oz. August 5 only a trace of albumen left; and by August 27, sp. gr. was 1010; no albumen; no casts. She regained consciousness in thirty-six hours and, though a little wild in her talk, sight became fairly good. August 27 she was apparently entirely well, a slight odor to lochia, so a warm douche of carbolized and sterilized water was ordered for vagina, twice daily. Of course this patient is still in bed and under close observation, but I do not anticipate any further trouble. Diet has been entirely liquid—vichy, barley water and peptonized milk.

If the relation of these cases has been tedious and a little too long, my apology is the severity of the affection. Though I have now used all the different treatments recommended I have abandoned these for this one, which seems to give the best results; *veratrum viride* is undoubtedly of great assistance sometimes, but unless you get Norwood's tinct., the other preparations are uncertain in their action.

To my view the principal factor is to maintain unconsciousness with chloroform and morphin until the cycle of periodic return of spasms has been passed; eliminate all the time, by the kidneys, bowels and skin, regardless of the theory of the cause of the disease and never leave your patient until she is out of danger. Each case is a study in itself, and no one can do as well in a given case than the one who has seen the case from the beginning and who has been able to control the condition.

#### BIBLIOGRAPHY.

Williams' Text Book on Obstetrics.

Playfairs' Midwifery.

Bouchard—*Lecons sur l'auto-intoxication. Traité Pratique des Accouchements et du Traitement de l'Eclampsie.*

LEVEN—Puerperal Convulsions.

*Medical Record.* Nephritis. *loc. cit.*

DR. D. L. WATSON read a paper entitled

**"Acute Parenchymatous Nephritis in Pregnancy; Puerperal Convulsions; Report of Cases.**

It is not the province of this paper, to enter an extensive resumé of the various authors who have written upon the above subject, nor to compile a statistical record, to prove a pet treatment or operation; but rather to make a clinical report of a few cases, which I have culled from my notes, to demonstrate certain phases of the success and failure in the treatment of the above dreaded disease. When I was asked to read a paper on eclampsia, I at once added, "Acute Parenchymatous Nephritis in Pregnancy," because the two affections are so intermingled that it is impossible to treat, intelligently, of the one without referring to the other. It is with acute parenchymatous nephritis that we have to deal in eclampsia and not chronic nephritis. After repeated frequent pregnancies, the acute will terminate in the chronic form.

The symptoms of acute nephritis are few but definite. So much so, that, if a physician be called in time, there should be no convulsions. Some authors state that they are as easy to prevent as sepsis. This, perhaps, is too strong in view of the sudden and rapid attack of some of the cases. The symptoms are headache, generally frontal, or the eyeball itself may be the seat of the most pain, though it may extend over the entire head. Disturbance of vision, dim or blurred sight, and sometimes complete blindness; epigastric pain is always present and is generally quite severe; and the patient will almost always attribute it to indigestion. These symptoms, occurring in a woman after the sixth month of pregnancy, should always direct the physician's attention to the urine, which, on being examined, will be found to contain more or less albumen, generally in large quantities. Some authorities claim that from 10% to 20% of the cases of eclampsia are free from albuminuria, but for my part I believe that all cases of true eclampsia are attended with albuminuria; generally a large amount of albumen. The ultimate pathological condition of eclampsia is still in dispute, but we do see combined pregnancy, albuminuria and eclampsia; and, if we will terminate the pregnancy, we will control the convulsions and generally cure the nephritis.

Eclampsia is, then, but a symptom; the culmination of a series

of symptoms all pointing to acute parenchymatous nephritis, a disease which if not treated heriocrally in the beginning, will soon destroy the patient's life. There seems to be no certain predisposing causes, conditions, surroundings or stations in life which might point to this disease. The poor, the rich, the laboring woman and the lady of leisure, are equally liable to an attack. Fortunate indeed, it is, that out of so many pregnancies so few are affected with this disease.

The prognosis is favorable if seen early in the attack; very grave if seen after convulsions have begun. Untreated, its progress is rapidly fatal. The treatment is based on rational lines, and it should always be remembered that an early diagnosis and early institution of treatment insures success. When a patient places herself under your care for treatment, always caution her thus—"If at any time you should have any disturbance of vision, severe frontal headaches or epigastric pain, send for me at once and also send me a specimen of your urine." These simple instructions will do more to save your patient's life than all the after treatment you can give.

If the symptoms are not severe give patient a hot bath, purgative enema, put to bed and wrap in blankets. A hypodermic of  $\frac{1}{4}$  to  $\frac{1}{2}$  gr. of codein will allay pain and procure sleep. Two grains calomel and soda triturates should be given every hour until ten grs. each are taken and afterwards keep the bowels soluble with compound jalap powder, sulph. of magnesia or elaterium. All food should be prohibited for from twenty-four to seventy-two hours and large quantities of water insisted upon, one to three gallons a day, if possible. 1-32 gr. of pilocarpin should be given every four hours, until free diaphoresis is produced and then continued for effect, until symptoms subside. The knee-chest position should be tried for a few minutes every four hours for a few days and it frequently does much good. Then if you place your patient upon an absolute milk diet and strychnin sulphate for the remainder of the term, you will have the pleasure of delivering her of a fine healthy child. But, if the symptoms should not subside and continue to grow worse, which many of them will do, termination of pregnancy will have to be considered. Here we have no definite rule, but all is left to the attending physician and his consultant. Always remember these few points: That a healthy infant born



after the seventh month of pregnancy has a better chance of living than one born at full term, after several weeks of severe sickness in the mother; that acute nephritis grows rapidly worse, so much so that in a few days repair will be impossible; that after the uterus is emptied the tendency is toward rapid recovery.

In eclampsia the uterus should be at once emptied. In my opinion there is no exception to this rule.

*Forced Accouchement and Treatment.*

It must be remembered that there is no operation, either in surgery or obstetrics, that is attended with more danger or is subject to more complications than is forced accouchement. Take into consideration that the surroundings are frequently quite unsanitary and that there depends upon your success as an obstetrician two lives one yet unborn, and a mother and wife whose place in the home cannot be filled; then you can realize that the responsibility is great indeed.

Dangers are: Shock, post partum hemorrhage, anesthesia and sepsis. You should have at least one reliable assistant and one anesthetist, though emergencies may sometimes compel you to operate with the neighbor women as assistants. Thoroughly wash the parts, give a vaginal douche and rectal enema, and at the same time give hypodermically 1-3 to 1-2 grs. of morph. sulph. and  $\frac{1}{8}$  to  $\frac{1}{2}$  grs. pilocarpin. Examine your patient; if labor has set in (so much the better), if not, with one hand on the fundus of the womb to hold it firmly down, introduce one finger into the cervix and stretch the os as much as you can. Repeat this every ten minutes, until you can pass in the two fingers, then three, four and the entire fist. Do not rupture the membranes until the child is born. Avoid chloroform if possible as it is very dangerous. In forced accouchement before convulsions or when not in a hurry this procedure may extend over 24 to 48 hours, when labor will come on naturally without instruments or an anesthetic. Here, I wish to offer one word of strong caution—have the os well dilated, not dilatable. It is the point of resistance in most cases of forced accouchement. Better tarry a while with fist in the os, until the os is fully dilated and will remain so, than try to apply forceps or perform version with a dilatable os, which will again contract and cause you to draw the cervix to the vulva and perhaps lacerate it. Undue force or delay may cause the death of the child. The choice between forceps

and version is generally best decided by the man with his hand in the womb, with preference always for the forceps.

Post partum hemorrhage is of very frequent occurrence in this operation and is of two kinds; one where the womb fails to contract and the other from a lacerated or contused cervix. This classification is absolutely essential in order to successfully control the hemorrhage. If the womb is firmly contracted, the hemorrhage is from the cervix, if not it is from the body of the womb.

#### TREATMENT.

Never pack a noncontracted womb. Remove the placenta, keep hand in the womb, make gentle massage with the other hand on the abdomen. Grasp the womb with one hand on the fundus and the other around the cervix and hold it firmly. Put ice in the womb or swab out the internal surface with vinegar. The above procedures will generally succeed. If the hemorrhage is from the cervix pack firmly with sterile gauze.

I have used infusion of normal salt solution directly into the veins with good results. It is to be highly recommended as an adjunct. Incision of the cervix in the anterior median line is far superior to the use of any dilating instruments. The after treatment of convulsions is the same as for the acute nephritis.

#### CASES:

CASE I. Mrs. A., age 19, previous health good, primipara; saw her after second convulsion, had had a blinding headache and epigastric pain for three days previous, 1-3 gr. morphin and 1-6 gr. pilocarpin were administered hypodermatically. Os was fully dilated, head at superior strait. Chloroform administered and forceps applied to the first child. Second child born natural labor,  $\frac{1}{2}$  hour later without chloroform. Pilocarpin and magnesia were given for three days, when strychnin was substituted. Mother and twins both did well. Dr. O. Czarnowski was my consultant. Nineteen months later I treated her for acute nephritis during the last month of pregnancy and delivered her of a nine pound boy.

CASE II Mrs. B. Third child, previous health good, full term, slight dilatation of os. Consultant advised no interference with labor. Chloroform for convulsion and veratrum viride, calo-

mel and croton oil purge, hot applications. Os dilated slowly. High forceps delivery, nine hours after first convulsion. Patient died three hours later in coma. Child lived.

CASE III. Mrs. C. Sixth child, about eighth month of pregnancy slight dilatation, treated the same as case II, delivered with forceps and version of twins twelve hours after first convulsion. All died.

CASE IV. Mrs. D. Fourth child. previous good health. Five convulsions after labor. Placed in hot pack. Hpo. morph. sulph. 1-3 gr., pilocarpin 1-6 gr. Repeated with half the amount in four hours Patient discharged 30 days later perfectly well.

CASE V. Mrs. E. Age 29, previous health good, primipara at about seventh month of pregnancy. Called first to see her at 6 o'clock a. m., after second convulsion. No labor. Gave 1-4 gr. morphin. 1-150 gr. atropia and  $\frac{1}{8}$  gr. pilocarpin. Purgative enema. Obtained consent to bring on labor without operation. Began gradual dilatation at 6 o'clock. Had third convulsion at 8:30. Dr. L. G. Le Beuf was called in consultation and we both insisted on immediate delivery. Consent being given, with patient under chloroform, I applied forceps at the superior strait through a dilatable os. Delivery was easy. Had two convulsions after delivery. Morphin and pilocarpin were continued so that by 2 o'clock, or in eight hours she had taken one grain of morph, and half grain pilocarpin. At three o'clock, patient was in almost profound stupor. At 3:30 womb had relaxed and patient had profuse hemorrhage, which came, no doubt, primarily from a badly lacerated cervix, extending into the bladder (vesico vaginal fistula). The womb was made to contract, with massage and ice, and the cervix and vagina were packed with gauze.

The fistula was not found until the following day. This laceration was caused by the cervix contracting after the forceps had been applied, and in making traction, necessarily, caused the laceration. Time would have been saved by holding fist in cervix until it would remain dilated, thereby saving a laceration, a fistula and a hemorrhage. The after treatment was strychnine, elaterium and a milk and fruit diet. Six weeks later the patient was taken to the New Orleans Sanitarium and the fistula closed by Dr. Martin. The operation was a success. After three months there was no albuminuria and the patient was normal.

CASE VI. Mrs. F., age 32, sixth child, six and one half months pregnancy. Acute parenchymatous nephritis. After ten days active treatment and no perceptible improvement, termination of pregnancy was determined, which was done by gradual dilatation. After 36 hours, high forceps delivery was accomplished, without an anesthetic or an accident. After three months, patient is practically well. Child lived fifteen days. Dr. Le Beuf was my consultant in this case.

Many more such cases might be reported. In conclusion, I wish to state emphatically that from my experience, morphin, pilocarpin, active purgative, hot pack, lots of water, no food and forced accouchement is the treatment par excellence for acute parenchymatous nephritis and puerperal convulsions.

#### DISCUSSION.

DR. MAINEGRA thought it was an interesting subject and one which every physician should take pleasure in discussing, and at the same time give the treatment that would render the best results in their hands. He did not believe it a disease, but a condition brought about by the pregnant uterus. If the physician was called in time, 95% of the cases could probably be prevented by observing certain rules.

DR. ELLIOTT, JR., had never seen a case of eclampsia. He had made it a rule for the past two years to not only examine for albumin, but to determine the per cent. of urea in 24 hour urine. He did not believe that albuminuria was the cause of eclampsia, for he had seen a case in which there was 40 per cent. of albumin, with no convulsions. Chloroform was good, but he was doubtful of the efficacy of morphin. He was a thorough believer in the plan of elimination. He never used pilocarpine, being afraid of it, having witnessed alarming symptoms through its use. He thought blood-letting and infusions were along the right lines of treatment. Irrigation, with high saline enemata was a valuable agent in these cases.

DR. MILLER hoped that some of the pathologists would give a brief resume of the present views on the etiology of eclampsia. Recently he had seen reports from Edinburg clinics by Stevens and also from India, in which the use of thyroid extract was employed with encouraging results. The study of the placental ferment and migration of decidual cells was an interesting phase of the pathology, that future investigations may show to play an important role



in the pathology of the disease. He frequently used chloral, where the os was not dilated. The bromide and chloral in drachm doses incorporated in mucilage acacia and given by enema, were valuable adjuncts in the treatment of the disease. He thought morphia was contraindicated in dilatation of the right heart. Saline infusion and subcutaneous infusion acted rather slowly upon the course of the disease. As to whether it was advisable to deliver at once, was a question of judgment. He thought it not wise to hurry where delay was not dangerous. Convulsions in 85 per cent. stop after delivery. The vaginal Cæsarian section was used in some cases.

DR. LEMANN wished to say a few words in reference to nitroglycerin which he considered safer than veratrum viride or aconite. It dilated the peripheral circulation and helped elimination. In view of our ignorance as to the etiology of the condition, treatment must necessarily be symptomatic and chief among our resources were those directed to elimination, namely: hot packs, free purgation, etc.

DR. WEIS said that nothing definite was known regarding the etiology of eclampsia. During his stay in Vienna, at the General Hospital, he had assisted at two autopsies of eclampsia. They showed marked areas of necrosis and infarcts in the liver. The migration of the decidual cells from the placental site is considered by some observers as a cause of eclampsia. Regarding the blood he looked upon its nitrogen content as a matter of importance in the study of eclampsia. There was no real primary nephritis in eclamptic patients and he could not agree with one of the essayists as to acute parenchymatous nephritis being a cause of eclampsia. The determination of the amount of urea in 24 hours urine was a point not to be overlooked in the management of cases of pregnancy. The pathology of eclampsia was still very obscure and it was a disease in which a great deal was yet to be learned.

DR. KAVANAUGH spoke of three cases of puerperal eclampsia that he had had in his practice and also of two in which he had assisted Dr. Watson. He thought that the cause of the disease was in most cases due to some malfunction of the kidneys. Most all the theories were as yet unproved. The kidneys being back of the whole condition the treatment should be aimed at correcting their deficient action. By pursuing the general plan of treatment such as mentioned in Dr. Watson's paper, all three of his cases recovered. He used

hot moist packs in one case; in the other two, pilocarpin and morphin, and chloral in 30 grain doses. As all were in rapid labor he did not hasten or interfere; however he considered that in all cases the uterus should be emptied as soon as possible.

DR. M. M. LOWE said that together with Dr. W. E. Brickell he had attended Mrs. K., who had several eclamptic convulsions. The husband entreated us to do all we possibly could to save the lives of his wife and child, but to do nothing which might destroy the latter. Dr. Brickell strongly maintained that eclampsia was due principally to the condition of the maternal blood and not to the erroneous idea of the presence of the fetus in utero. He said with Gooch, "Treat the spasms and leave labor take care of itself," (Playfair's System of Midwifery, p. 577). The mother was delivered of a living male child, after fourteen hours of severe eclamptic convulsions. Neither mother or child was injured, but the mother died about five hours after delivery. The child lived a little over six months.

DR. McGRANE mentioned the trouble that frequently arose from the employment of hypodermoclysis when given in the loose and fatty tissues in the region of the breast.

DR. JACOBY said that he thought that the result of the determination of the nitrogen content of the blood would be found high in eclampsia and he would like to know what observations had been made on this line.

DR. CLARK stated that from two cases recorded in Dr. Eustis' paper on the nitrogen content of the blood in eclampsia there is just the opposite to what Dr. Jacoby thought was present; that is, a low nitrogen content of the blood was shown in the only two cases Dr. Eustis had had occasion to make observations upon. This was corroborative of the present consensus of opinion as to the relation of albuminuria in the causation of eclampsia. Should the eclampsia have been caused by retention of nitrogenous elements in the blood it should have been shown by Dr. Eustis' method. The cause of eclampsia was generally recognized as being due to some toxin element, whether from the fetus or the transition of the decidual cells, it mattered not; and the kidney was secondarily influenced by this irritating poisonous element circulating in the blood. The presence of albumin in urine, to his mind, was simply a forewarning that one was dealing with a condition where toxic elements were

present and promoted to the great necessity of promoting elimination by all known means. The ground taken by Dr. Watson that acute parenchymatous nephritis was the prime cause of all eclampsias was not in accord with the present opinions as to the etiology of the disease.

DR. LE BEUF in closing his discussion said that he used nitroglycerin in all his cases. He believed in the use of chloral prior to the convulsion. Bromide was used to keep up anodyne effect after morphia was discontinued.

DR. MILLER asked had any of the gentlemen noticed what effect morphia had upon the child?

DR. WATSON said in doing that he had never seen any evil effects on the child from large doses of morphin.

He considered that an immediate delivery or termination of pregnancy always gave both the mother and child a better opportunity of living.

DR. H. B. GESSNER read a paper entitled:

**“Nerve Blocking to Prevent Amputation-Shock; Illustrative Reports of Two Thigh Amputations.**

In the September, 1902, issue of the *Annals of Surgery*, there appeared a paper by Dr. Harvey Cushing, of Baltimore, Associate in Surgery, the John Hopkins Hospital, “On the Avoidance of Shock in Major-Amputations by Cocainization of Large Nerve-Trunks, Preliminary to their Division—with Observations on Blood-Pressure Changes in Surgical Cases,” being the basis of the address in surgery, Wis. S. Med. Soc., June 4, 1902.

In this instructive paper the matter of amputation shock was dealt with at some length. Cases were narrated in which nerve section in the course of amputation was followed immediately by extreme depression, others in which, as a result of the nerve-blocking effect of cocain this depression was avoided. In the paper referred to, Cushing makes mention of the pioneer work of Geo. Crile of Cleveland, Ohio, along this line and gives him ample credit for his thorough, exhaustive and richly fruitful work of research on shock. (See Problems Relating to Surgical Operations, by Geo. Crile, M. D., Philadelphia, 1901, p. 157.)

I believe that I can use to advantage some of the time allowed me this evening in quoting the following statement of principles by Cushing: "(1). By common usage the term 'shock' has come to represent a peculiar state of depression of the normal activities of the central nervous system. Such a condition is ordinarily brought about by traumatism, of one sort or another, to peripheral afferent nerves. In order to produce shock, the impulse resulting from this traumatism must have acted reflexly upon the vasomotor mechanism in the medulla in such a way as to occasion a marked fall in blood-pressure. This diminution of arterial tension is the most characteristic symptom of shock.

"(2). Under ordinary circumstances injuries of only moderate severity to peripheral nerves cause a rise in blood-pressure. If, on the other hand, these injuries are extensive or frequently repeated, or if they are complicated by certain primary or secondary anemias, they are commonly productive of a fall in blood-pressure, indicating a state of shock.

"Shock consequently need not be occasioned even in most extensive surgical procedures on the extremities, provided due regard is given to perfect hemostasis. In operations of considerable magnitude, however, during which the divisions of many large nerve trunks become necessary, or in operating upon such traumatic cases as have been already complicated by extensive injury to peripheral sensory nerves, so called operative shock is rarely avoided. When, therefore, any condition is existent which predisposes to shock, such as loss of blood, prolonged anesthesia, etc., or when a certain degree of shock is already present before operation, especial risk is attendant upon the division of important sensory nerve-trunks.

"(3). Cocain injected into a trunk effectually blocks the transmission of all centripetal or sensory impulses. Cocainization, therefore, of main trunks of nerves central to the proposed site of their division in a major amputation prevents the conduction of those impulses resulting from the traumatic insult which otherwise, by acting reflexly through the medullary centers, might become the chief factors in the production of shock."

Having occasion recently to amputate a thigh, and retaining a vivid impression of my last amputation at this site, which ended



fatally through shock, I determined to apply the nerve-blocking method.

The following are the details of the case:

E. D., colored male, 23 years old, laborer, from Purvis, Miss., admitted to Ward I, Charity Hospital, New Orleans, June 24, 1904. Diagnosis. Tuberculosis of right knee-joint and femur, with partial ankylosis. Circulatory organs normal with the exception of a slight hypertrophy of the left ventricle. Respiratory organs and liver normal. Urine contained, July 4, bladder epithelium, hyalin and finely granular casts, urates oxalate of lime, bacteria, mucus; reaction acid, sp. gr. 1026.

The history given was of temperate habits, with some little cigarette smoking; measles, mumps, and whooping cough in early youth.

Several attacks of malaria. No history of venereal disease. Family history good.

Three years ago patient was thrown from a horse, striking his right knee against a post. But little pain was suffered. Patient was able to walk at once. Within a month the knee had begun to swell and was painful; a purulent discharge soon made its appearance, continuing to the time of admission.

The neighborhood of the right knee was found to be riddled with sinuses; there was induration and pigmentation about the sinus openings. The knee was kept flexed at an angle of  $45^{\circ}$ ; it could be flexed further, but extension beyond this angle could not be effected.

Operation was undertaken July 7 under chloroform administered by W. B. Chamberlain, R. S. The knee joint was opened by the curved transverse anterior incision of Textor and the soft parts dissected so as to permit thorough inspection. The involvement of the joint was extensive; the femoral condyles were deeply eroded and the femur for several inches above the condyles was affected with osteo-myelitis.

Our experience with conservatism in this class of cases at this age (after the second decade) having proven highly unsatisfactory, amputation was determined on, his permission having been obtained before the operation was begun. A long anterior and short posterior flap amputation was done at the middle of the thigh, a rubber constrictor securing prophylaxis of hemorrhage. When the

posterior flap was being fashioned through the muscles after preliminary outlining through the skin, care was taken to identify the great sciatic nerve. This was edematized with 25 m. of 2% sol. of cocain hydrochlorate, then divided at the edematized level. The amputation having been done, the great sciatic and the internal saphenous nerves were edematized with the same solution on being drawn out for shortening, 25m and 10m being used on them respectively. The pulse, which had been 80 while the patient was in the ward, was found to be 75 at this time; by the end of the operation had fallen to 62; its character was excellent throughout.

Stimulation during the operation was limited to 1-30 gr. of strychn. sulph. given hypodermatically by the anesthetist just before the first nerve section.

The usual care was taken to preserve the body heat by covering the trunk snugly with a blanket. The stump was sutured in layers; Kumol catgut No. 1. was used for the deeper layers, silkworm gut for the skin. Healing was primary. All sutures were removed from the skin on the 16th, nine days after the operation.

#### COMMENT.

One swallow doesn't make a summer, nor does one case of any kind establish a principle. It may be that our patient, without the nerve blocking, would have fared as well. But the complete absence of the shock in an operation of this severity makes me credit the method described with a large share of the good result observed. I feel encouraged to employ the method again and shall certainly feel it my duty to do so whenever, in similar cases, shock is specially to be feared.

It will be observed that over 1 gr. of cocain (60m. of 2% sol.  $\frac{1}{2}$  gr.) was used for nerve blocking. I believe that we may fairly count on a waste of the odd 5th and assume that but one gr. was used.

Of the grain a large fraction must have been lost from the edematized nerve tissue when it was divided. Possibly a smaller quantity of the same solution, or the same quantity of a 1% solution, would have the same effect, with much less danger of cocain toxics.

---

Since writing the above I have had the opportunity of applying the same method to another case, the details of which follow:

B. R., colored male, 15 years old, farm hand, from Hulda, Con-

cordia Parish, La., admitted to ward 1, Charity Hospital, New Orleans, August 18, 1904. Diagnosis, Chondro-sarcoma, rt. tibia, upper extremity.

Patient anemic-looking. Circulatory organs normal but pulse 120; incipient tuberculosis found at apex of right lung; liver normal; urine showed, August 19, specific gravity 1014, reaction acid, leucocytes, bladder epithelium, mucous casts, bacteria, mucus.

The history given was of temperate habits. No history of venereal disease. Had suffered from chills and fever, measles, whooping cough. Family history good except as to mother, who is troubled with asthma at the age of 50 years.

The patient has had a swelling about his right knee since January; occasional pain has been felt; since June he has not done any work. Early in July a physician made an incision on the inner side of the knee, evacuating blood only; in two or three days, under poulticing, pus began to flow, which ran for some time, the opening finally healing up.

Examination showed a smooth swelling on the inner side of the right knee, extending from the patella down for 8"; transverse measurement of tumor 8"; circumference of limb at largest point  $16\frac{1}{2}$ " as compared with  $11\frac{1}{2}$ " on the other side. The scar of a small incision was visible. On the external side of the knee there was some fulness with fluctuation just beyond the patella; the joint appeared to contain fluid.

Operation was fixed for August 23, after stimulation with strychnine sulph. gr. 1-60 every four hours for three days before operation; gr. 1-30 every four hours during the night preceding it. Anesthesia was induced with chloroform by Interne P. B. Salatich. Incision was made into the swelling showed a new growth, probably sarcoma, involving the upper extremity of the tibia on the inner side (Examination of the specimen by the Pathologic Department of the hospital has since shown it to be a chondro-sarcoma.) Having obtained the patient's consent before the operation I proceeded to amputate through the thigh, after applying the constrictor, making the bone section a little below the middle of the limb. The long anterior and short posterior flaps method was employed. Cocaine was used to block the great sciatic before division, the same nerve and the internal saphenous before shortening—in all 75m. of a 1% solution. The operation was begun at 10:10, with a pulse of 100; 10:18, pulse 110; 10:25, pulse 105; section of nerves made; 10:28,

pulse 103. The operation was completed at 11:10, pulse 110. No difference in the quality of the pulse. Pulse could be appreciated as the result of the amputation. The deeper planes were sutured with Kumol catgut, the skin with silkworm gut. The usual dressings were applied, with a pelvo-femoral cardboard splint.

On the following morning, August 24, the patient was found looking and feeling perfectly well; in fact, he was sucking an orange complacently. His pulse, however, was 128; this caused him to be put on hypodermatic stimulation, with strychnin sulph. gr. 1-40, tr. digitalis min. 3, every four hours.

August 24, p. m., pulse 136; same stimulation, with exception of increase of tr. digitalis dose to 5m.

August 25, a. m., pulse still 136; hypodermatic stimulation was discontinued on account of complaints of pain by patient; fl.  $\frac{3}{4}$  of strych. and dig. (Charity Hospital), containing gr. 1-30 strych. sulph. and  $\mathfrak{M}$  v tr. digitalis, was given by mouth every four hours

August 25, p. m., pulse 120; August 26, a. m., pulse 102; August 27, a. m., (today), pulse 70, full and strong.

The temperature was highest on the evening of the first day, 100° F. Fever, therefore, did not account for the pulse rate.

#### COMMENT.

In this case I was able to obtain a good immediate result as to prevention of shock by the use of a 1% sol. of cocain. The later rise in pulse I cannot explain except by the use of the expression "delayed shock," if indeed that be an explanation and not simply the application of a name to a condition. At any rate, considering the rapidity and character of the patient's pulse before operation, I feel that the blocking method was of distinct advantage in enabling us to get through the operation in safety.

In neither case did any evil result follow the blocking. I feel, therefore, justified in recommending the method as one well worthy of further trial, promising much that is good and so far appearing to be attended with no disadvantage, not even that of prolonging the operation, as it would more than cover the time necessary to do the blocking.

Thanks are due the Interne of my hospital service, Mr. W. E. Sistrunk, for valuable assistance in the management of these cases, as well as for the notes on which the reports are based.



## DISCUSSION.

DR. JACOBY asked whether Dr. Gessner had seen cases of thigh amputation die from shock following the division of the sciatic nerve? Personally he had assisted in a number of thigh amputations and did not recall having witnessed any immediate shock of consequence when the sciatic was incised.

DR. MILLER asked what did the reader of this paper think would be the effect of water used in the same way as cocain?

DR. GESSNER said that thigh amputation not followed by shock was noteworthy and Dr. Jacoby's observations were not in accord with those of the profession at large. Statistics showed a heavy mortality in thigh amputation. He had seen several die from apparent shock in the Charity Hospital, and he thought that the mortality would probably reach 20%. He did not believe that water alone would have the same blocking effect as did cocain, though by making a nerve anemic it would tend to have the same effect, in some degree. He had used saline solutions infiltrated into the skin for grafting, but the anæsthesia was by no means perfect. He urged everyone to give the use of cocain a trial in controlling shock in thigh and other major amputations.

---

MEETING OF SEPTEMBER 10, 1904.

DR. MAGRUDER, President, in the chair.

DR. VAN WART read a paper entitled "*The Nervous System in Pernicious Anemia.*"

After mentioning the history of the development of the knowledge of combined lesions of the spinal cord and their relation to pernicious anemia, the case of a white male was reported, who showed the symptoms of this condition. The patient gave a negative family and personal history. The first symptoms noted were numbness in the left hand, which gradually progressed up the arm. This was followed by a gradually increasing weakness. At the time of examination the blood condition was: Hemoglobin, 55%; red blood corpuscles, 1900000; white blood corpuscles, 8000. There were many megalocytes and poikilocytes. Megaloblasts were constantly found until death. The nervous system showed a marked degree of ataxia, with greatly increased reflexes. There was a marked patellar clonus and ankle clonus. Babinski's sign was present. There was delayed sensation. The reflexes grad-

ually disappeared. Bladder and rectal disturbances became prominent. The spastic paralysis gave place to a flaccid one, and the patient died two years after the onset.

Mention was made of similar cases and attention was called to the other nervous and mental phenomena which other observers had recorded as occurring with pernicious anemia.

#### DISCUSSION.

DR. GUTHRIE said that he could not resist the temptation to discuss the condition of the blood in this disease. He wished to emphasize the fact that it was not a true or idiopathic anemia, although so called. The blood condition is unique and the diagnosis can be made only from a microscopical examination of the blood. The number of red blood corpuscles usually number about 1,200,000, the lowest recorded number being 143,000, reported by Quinks. This latter case responded to treatment. The blood is hydremic and there is a diminution in all the blood constituents. The actual hemaglobin is low, but relative to the number of red blood corpuscles it is high. The diagnostic feature of the blood is the presence of megaloblasts. There are few other conditions in which this blood corpuscle occurs, but when their numbers exceed the number of normoblasts, they are absolutely pathognomonic of pernicious anemia. Poikilocytes are also found. In staining the blood cells, a simple double dye, i. e., one containing an acid and basic constituent, can be used, so as to bring out the nuclei, which take the basic stain. The leucocytes also undergo a change (lymphocytosis) and myelocytes may occasionally be found. The megaloblast furnishes the differential diagnostic sign between a primary and a secondary anemia. After an extensive search he had seen four true cases of *pernicious anemia* in the Charity Hospital when he was an interne and he had made at this time microscopical examinations of many other cases with a clinical diagnosis of pernicious anemia, with negative results. He believed that many so-called pernicious anemias are often cases of hookworm disease. He had seen the blood slides of the case reported by Dr. Van Wart and he wished to corroborate the statement made by the doctor in regard to the blood findings. He did not think, however, that he had laid enough stress on the average diameter of the red corpuscles which Dr. Van Wart had measured and found 70% exceeded the normal diameter.

DR. LEBEUF stated that the case reported by Dr. Van Wart was a local man of considerable prominence and had drifted from one physician to another and various diagnoses had been made. However, it was not until Dr. Van Wart had seen the case that the diagnosis of pernicious anemia had been made. In this case gastric disturbance was the principal complaint and he was glad to note that Dr. Van Wart had spoken of the disease as being of toxemic origin sometimes. He thought likewise.

DR. EUSTIS said he wished to speak of the importance of this disease from a medico-legal standpoint. In testing blood stains a great deal of stress is laid upon the size of the corpuscles as measured with a micrometer eye piece and where a victim had pernicious anemia this test for blood must necessarily be of very little value. There is no notice of this taken in the text books on medical jurisprudence and he thought it was a point upon which great stress should be laid. He had seen a case last winter with Dr. Clark in which the diagnosis was made entirely upon the microscopical findings in the blood. The symptoms of this case were not at all well pronounced and the only complaint was inability to sleep on account of dyspnea, and a progressive emaciation. The patient could assume the recumbent position as long as he was awake, but on falling asleep he would develop Cheyne-Stokes respiration. He wanted to know whether Dr. Van Wart could explain this peculiar symptom of the disease. The patient excreted from 25 to 30 grams of urea in 24 hours and his blood contained 80% of hemoglobin, with 2,350,000 red blood cells.

DR. VAN WART, in closing the discussion, said that while combined sclerosis of the spinal cord did not occur only with pernicious anemia, its occurrence with other conditions was so infrequent that it very often suggested, as in this case, the presence of pernicious anemia. The diagnosis of pernicious anemia cannot, however, be made from the nervous symptoms, but he wished to emphasize the importance of a blood examination where they were present. The outlook in this disease is always bad. In reply to Dr. Eustis, Dr. Van Wart said that the dyspnea in this case might have been due to the anemia. Dyspnea was a common symptom of any grave anemia. It would, however, be impossible to more than suggest this, as personal examination of any case was necessary to reach any definite conclusion.

## REPORT OF CASES.

DR. LEBEUF reported a *case of opium poisoning successfully treated by inhalations of oxygen*. The patient, white male, had been drunk for nine days and was on the verge of a collapse from delirium tremens. Bromides had been administered to quiet the excited mental condition, but owing to its depressing effects the physician in attendance had administered one quarter of a grain of morphine hypodermatically. A few hours following the injection the patient showed all the symptoms of acute opium poisoning, with stertorous breathing, respiration slowed and cyanosis. Dr. LeBeuf was called in consultation when patient was in this condition. Lavage was performed, patient was stimulated and artificial respiration was practiced along with the use of the electric battery. The patient was becoming progressively worse and oxygen inhalations were employed when the patient was very nearly in a moribund condition. Within three minutes the respirations had increased in number, the pulse had improved and the patient eventually recovered. He thought it was interesting to note the beneficial effect of oxygen in this case.

DR. SEXTON reported a case in which there was severe *pain following amputation of a limb*. The patient was apparently in perfect health and the wound had healed completely, but there was intense neuralgia pain in the scar of the stump. The end of the bone was well covered and to all appearances the result had been an excellent stump. On account of the severe pain he incised the old scar and found a nerve bulb bound up in the scar tissue, which was dissected out and the nerve excised. Since then the pain had entirely disappeared. The re-amputation healed by first intention. The patient went home on the seventh day after the operation.

DR. ELLIOTT, JR., reported a case of *a woman who had been operated upon about 11 times for vesico vaginal fistula*. She, later, became pregnant and he had occasion to observe her in this condition. The caliber of the vagina was the size of about a dollar, with walls of dense cicatricial tissue, absolutely unyielding. He incised the vagina on either side with a bistoury and delivered with forceps, after which he sutured the incisions in the vaginal walls. There was no tear in the bladder and the patient made a complete recovery.



# N. O. Medical and Surgical Journal

---

## Editorial Department.

---

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

---

### The Scope of National Vital Statistics.

The twelfth census of the United States carries a fairly complete record of the vital statistics of this country. That this particular department of the census reports is of growing importance must be quite patent to all interested in the sociologic progress of our country. It is interesting to note in this regard the discussion\* on the last report, prepared by Dr. John S. Billings so long identified with the Government library and the National statistics. This discussion is altogether a plea for more attention to the conditions involved and in the tables submitted a flagrant discrepancy must be evident to those who read that they are in large part built upon reports derived from a small proportion of the States in the Union.

In Great Britain the Registrar of Vital Statistics elaborately and exhaustively presents the status of vital statistics as related to the birth rate, marriage, accident, disease and even elemental crime. The confession of Dr. Billings is of rather forceful criticism when reviewing the conditions. He says: "No State has a complete registration of births, the ones that come nearest to it being probably Massachusetts, Rhode Island and Connecticut." He further states that "The only states which had a registration of deaths sufficiently complete to make the death rates worth calculating were Connecticut, Maine, Massachusetts, Michigan, New Hampshire, New Jersey, New York and Rhode Island, which with the District of Columbia, form the group referred to in the Census report as the 'registration' states. No Southern state, and no Western state, except Michigan, had any satisfactory system of registering deaths at

---

\*A Discussion of the Vital Statistics of the Twelfth Census, Department of Commerce and Labor. Bureau of the Census. Government Printing Office, Washington.

the time the data were collected. Even in the states classed as registration states the deaths were not all recorded."

Even while confessing the woful lack of completeness, submitted almost without argument, when only eight states with the District of Columbia have available data, the writer mentioned pleads a usefulness for the published report in its suggestions for comparative study with other nations' reports.

The twelfth census report was brought up to the year 1900, and since that time all over the United States there has been an evident improvement in the tone of public health conditions. Not only in Louisiana but in number of the States not named in the "registration groups," boards of health have grown active in formulating and in requiring registration of births, marriages and deaths, as well as enforcing the report of certain communicable diseases. Four years have demonstrated a long forward advance in the study of the more fatal diseases, especially common to urban communities, and the study of these of necessity implies their record and report.

Every time, however, that the Southern States are drafted into one group apart and are declared barren of some particular virtue, political, educational, economical, moral, statistical, or other, we feel at least a defense should be offered, even if it may not find large audience. Each of the States, except Michigan, embraced in the "registration group" has been under gradually improving State Health Boards since the first was established in Connecticut, sometime early in the nineteenth century. The machinery of these boards has been especially kept in working order by the fact that their communities are usually maintained without much change, especially in the smaller towns and county districts; beside the climate conditions which dictate their general habits have made the New Englander especially a precise disciple of rule. Hence, statistics are natural.

In the Southern States, with the absolute lack of control of the marriage relation among negroes, their own ignorance and neglect of most or any laws, their loose and flagrant immorality, their ready susceptibility to disease and their failure to either treat it or report it, all explain the absence of record in over one-third of the population. There is no doubt that this condition of affairs reflects itself upon the bulk of the white race, fostering a neglect of the requirements of the State regulations; but until special pro-

vision is made to study and to control the status of the negro, no exact or even fairly complete record of vital statistics will obtain in most of the Southern States.

Every health board should study the vital statistics report of the twelfth census and especially Dr. Billings' discussion thereof so that in the year 1910 there may not be so much room for criticism upon the neglect of so many states which do not belong to the "registration" group.

---

### Cancer Theories.

Since the question of extraneous origin of cancer was first ventured the votaries of experimental research along this line have increased numerously. In almost every country some new idea has been promulgated until we are now flooded with so many theories of cancer origin that there is a congestion. A few years ago the Buffalo experiments startled the readers of the daily and medical press—only to pass into a new spasm of interest at the Berlin experiments in inoculation with cancer. Almost all of the unit types of organisms have gone under the searchlight of some experimenter groping for an explanation of the morphology of the dread group of diseases, only to be in turn relegated to a background of oblivion in the onward campaign of new interpreters.

The carcinoma group is made up of wide variants in the range of types and all along the line an opportunity is afforded for speculation as to the processes involved in even the clinical varieties. Cohnheim has been relegated and his theory has been so grafted with new and adventitious ideas of germ stock that it is difficult to speculate upon what may next eventuate in the problem of discovering cancer origin. Almost every new theory is forcibly argued and even followed until it suffers experimental disproof and disbelief.

Protoplasmic bodies, psorosperms, bacilli and foreign organic units of malignant propensity have each been subjected to the experimental field and have been found wanting at some point.

Now comes an argument for the "Analogy between Smallpox and Cancer" from the fructive workshop of Dr. H. R. Gaylord, of the Cancer Laboratory of New York State, in Buffalo. In pre-

misgiving his own views\* the research of Borrell is quoted as favoring the original infective agent in both smallpox and cancer as a minute, if not invisible parasite, and that the inclusions are the result of degenerative changes in the protoplasm or of invaginated leucocytes in process of disintegration.

A careful study of parallel experiments has been made by Gaylord, including his own observations on comparative incident resemblances in cancer bodies and in those of vaccine. The conclusions point to a failure to prove the transplantability of cancer even though resemblances are close and the argument rests with the belief that there is a common parasitic origin in the exanthemata and cancer groups.

The interest which most attaches to such intricate propositions is clearly one of indirect importance to the average practitioner who can only think about such things at second hand. The laboratory expert must go on speculating in profitable fields of experiment, now casting in productive and again in barren waters until a flood of light may result, full of practicable application. Cancer remains a problem of magnitude and in its therapy full of rather strict limitations bounded on the one side by broad surgical application and on the other by doubtful therapeutic measures—each waiting on the declaration of some distinct discovery to show a better way to a successful treatment of the condition which is as yet a large factor in the mortality of human existence

The under world is full of undiscovered fields and any light is a step in advance, but we must continue hoping for an issue and must feel the burden of that hope when good workers grow so far apart in their beliefs and interpretations of the signs.

---

### The Pan-American Medical Congress.

Details of the congress at Panama may be found among our News Items. Nowadays medical and commercial subjects are intimately interwoven. It becomes the duty of New Orleans physicians in particular to attend the congress, owing, if naught else, to the deep commercial interest of this port in Isthmian matters.

---

\*On the Analogy between Smallpox and Cancer.—Gaylord.—*Med. Rev. of Rev.* Vol. X, No. 10, p. 900.



## Abstracts, Extracts and Miscellany.

---

### Department of Obstetrics and Gynecology.

---

A CASE OF VAGINAL CESAREAN SECTION FOR PLACENTA PREVIA. REMARKS ON THE TECHNIC OF THE OPERATION AND ITS RELATION TO OTHER METHODS OF DILATION.—Duhessen's name is so intimately connected with vaginal Cesarean section that any remarks by him on the subject are read with interest. The *Jour. of Obs. and Gyn. of the British Empire*, contains an extensive review of his paper published in the *Centralb für Gynäkol.*, No. 13.

He does not believe that the operation should be classed with *accouchement forcé*, because in the latter the dilatation produced is inadequate, and thereby the delivery may end in a fatal rupture of the uterus; this can never happen after the necessary incision into the vagina, cervix and possibly into the lower uterine segment, such as is carried out in vaginal Cesarean section. The writer is so sanguine as to the claims of this operation for a place amongst classical obstetric operations that he says it will soon be necessary for every author to devote a chapter to its description in books on midwifery.

Duhessen claims that the technic is so safe that no death should ever result therefrom. It is especially indicated in eclampsia and has already passed the stage of "*interesting experiment*" (the italics are Duhessen's, who recommends emptying the uterus by one of the approved methods after the first fit).

He states that the operation has been performed about 100 times and says the statistics speak for its relative safety. If properly carried out it is not more dangerous than other obstetric operations, and the writer claims that the special indication for its performance is eclampsia. In the delivery of fully developed fetuses—at term—the writer recommends splitting the posterior as well as the anterior cervical wall. Another adjunct of the operation is perineal incision when the rigid vagina demands it.

DIAGNOSTIC IMPORT OF THE SACRO-UTERINE LIGAMENTS.—Sellheim (*Bieträge Z. und Gynäkologie*—Hegars) proclaims that palpation of the sacro-uterine ligaments is the most reliable

means of distinguishing between tumors growing or in the ligament. Systematic palpation of these ligaments through the rectum should never be neglected in diagnosing gynecological affections. He gives numerous illustrations to show the anatomy and physiology of these ligaments, and the best technic for their investigation, as well as the interpretation of the various findings of palpation through the vaginal and rectal walls. Rectal examination is much easier than the vaginal. The examining finger in the rectum must be passed beyond the folds of the sphincter ani tertius. This brings it exactly behind the ligaments instead of below them, and palpation is facilitated by injecting a half pint of tepid water into the rectal ampulla. This distends the ampulla, but the sphincter still protrudes into the lumen, and is thus easily recognized. The finger passed beyond it is then crooked and the ligaments are readily felt at once. By pushing the sphincter and sacro-uterine ligament forward and downward, the palpating finger has a free field for further exploring the broad ligaments, the ovaries and tubes and the walls of the pelvis. The thin and yielding rectal wall allows the finger to palpate up to the fork of the iliac artery and forward almost to the horizontal ramus of the pubis.

Sellheim describes the findings in different groups of gynecologic cases.

Inflammation in the vicinity is usually accompanied by thickening and tension of the sacro-uterine ligament.—*Jour. of Am. Med. Assoc.*

---

## Department of Therapeutics.

---

In Charge of DR. J. A. STORCK, New Orleans.

---

THE USE OF SODIUM CHLORIDE AFTER AN APPLICATION OF SILVER NITRATE. *The Therapeutic Gazette* of Sept. 15, 1904, contains an article by Griess on this subject. He says: "The use of a solution of sodium chloride after the application of silver nitrate to any part of the urethra has shown itself in my hands to be of great value. This simple method is reported not with any idea of originality, for it has long been used by ophthalmologists whenever

silver nitrate was applied to the conjunctiva, with the idea of having the sodium chloride act on any silver salt which might be in excess. Its use in genito urinary surgery certainly is not general nor can an instance of its employment be recalled.

The indications and reasons for the employment of sodium chloride after the application of silver nitrate are:

1. The silver salt can be used with greater comfort to the patient, as all excess of silver is precipitated. (No bad results need be feared from the resulting precipitate.)

2. The effect that we desire from silver nitrate is accomplished quickly, therefore an excess should not remain in the urethra, as it not only causes unnecessary pain, but actual harm.

3. The caustic effect of the silver salt is eliminated to a great extent.

4. The stronger per cent solutions of the silver salt which are often necessary can be used, for we need fear no over action nor caustic effect.

5. The application can be made more general. We need not fear the action of an excess on any of the healthy tissue.

6. Clinical evidence shows that this method of application yields excellent results.

The reasons for better clinical results are certainly self-evident when we consider some of the above indications—i. e., that the proper per cent solutions to really do good can be used.

The application of the solution of sodium chloride should be in a manner the same as was employed when the silver was injected by means of a deep urethral syringe (Keys-Ultzmann). Enough time should elapse after the application to allow the operator to remove the syringe, wash it out, and then proceed as he did with the first injection."

EFFECTIVE INTERNAL DISINFECTION OF THE BILIARY PASSAGES.—Kuhn (*Munchener Medicinische Wochenschrift*.—*Jour. A. M. A.*) has been applying in the clinic the results of his experimental research in this line. As he has previously reported thymol, menthol and the salicylates are the only drugs out of a long list tested which displayed any efficacy in this respect without serious by effects. Salicylic acid passes into the bile in large amounts and even in a comparatively weak solution checks the fermentation of the bile. All the numerous tests resulted positive-

ly, and justify the assumption that the salicylates can be used for effectual disinfection of the biliary passages. Exhibition of the salicylates therefore, in cases of cholangitis and cholecystitis, is to be commended to the general practitioner. Further tests of a combination of two or more of the above mentioned drugs seemed to demonstrate a still more effectual action. He found that the gas-producing power of the bile derived from a biliary fistula was very much reduced when the subject was under the influence of the salicylates alone or combined with menthol or thymol. Bile from a biliary fistula exhibits progressive fermentation, but when the subject has been taking the above drugs the fermentation is much less intense and subsides much earlier. The effect of the drugs is not perceptible until after they have been duly absorbed and it lasts for some time after they have been suspended. The best internal medication in case of inflammation in the biliary passages is, consequently, salicylic acid and its salts."

ACID SODIUM PHOSPHATE AND ADRENALIN IN VESICAL DISEASES.—W. Ide C. Wheeler continues the history of a case first reported in September, 1903. The patient was 85 and had a violent hemorrhage after the residual urine was drawn off. This continued for six days, the patient watered every 10 minutes, laden with blood, notwithstanding rest, morphin, calcium chlorid and ergot. In a similar attack later the writer washed out the blood clots and injected a half fluidounce of adrenalin chlorid to one fluidounce of warm water. After this there was no further trouble. He remains now for three or four weeks without blood, then has a severe hemorrhage which is checked again by three or four injections. He suffers in the intervals with chronic cystitis with ammoniacal, purulent urine and, as in two similar cases, the writer has found acid sodium phosphate ( $\text{NaH}_2\text{PO}_4$ ) is most beneficial. Care must be taken that the pharmacist does not use official sodium phosphate ( $\text{Na}_2\text{HPO}_4$ ). It should be combined with a urinary disinfectant as in the following formula: Acid sodium phosphate, 8 gm. (dr. 2); urotropin, 4 gm (dr. 1); add infus. uvæ ursi, 180 gm. (fl. oz. 6). Sig. Tablespoonful three times a day.—*American Medicine*.



## Department of the Ear, Nose and Throat.

---

In charge of A. W. DEROALDES, M. D., and GORDON KING, M. D.,  
New Orleans.

---

TREATMENT OF HEMORRHAGES OF THE SKIN AND MUCOUS MEMBRANES WITH PENGHAWAR.—Mounier, of Paris, gives his opinion of this agent for arresting and preventing hemorrhage after a systematic test of its merits on a series of cases. Two years ago this new agent was brought to notice by Weber, who advocated it as the remedy par excellence in epistaxis. Later Lubet-Barbon read a paper before the Society of Laryngology of Paris recommending it as a preventative of secondary hemorrhage after operations in the nose and the throat. Penghawar Djambi as used medicinally comes as a mass of fine hair like fibres obtained from certain arborescent plants from the Orient. These fibres when applied to a bleeding surface have the property of causing rapid coagulation of the blood and prevents further bleeding. Hence its great usefulness in operations in the nasal cavity or in the throat, where it is usually necessary to cauterize the wound surface or, in the nose, to pack the cavity with gauze, which is a source of much discomfort to the patient and often leads to bleeding at the time it is removed. The action of the hemostatic seems to be purely mechanical, causing more rapid coagulation. It is entirely innocuous and is usually cast off with the secretions in a few days after the operation. The author was much impressed with its value as a hemostatic and finds that it also promotes more rapid healing of the wound.—*Archives Internationales de Laryngologie et d'Otologie*, etc. September-October, 1904.

THE DISADVANTAGE OF COMMERCIAL HYDROGEN PEROXIDE AS AN ANTISEPTIC FOR THE EAR.—At the recent meeting of the International Congress of Otology at Bordeaux, Bruder, of Paris, read a paper on the use of hydrogen peroxide in Otology, and while admitting that the drug has many valuable qualities as an antiseptic, he calls attention to some very grave accidents that sometimes occur from its injudicious use or from the use of the impure article. In France the drug may be obtained in three different qualities: medicinal,

surgical and commercial peroxide. The first two contain no impurities and when properly used give rise to no bad effects. The commercial peroxide on the contrary often contains irritant and cauterizing agents which when applied in the ear erodes the delicate lining of the auditory canal and is often the starting point of a very painful external diffuse otitis. To avoid this accident it is required to use vaseline or sterile oil in the canal before applying the peroxide. In cholesteatoma of the ear and in the course of mastoid operations its use is especially contra-indicated on account of the tendency it shows to become diffused into the epithelial mass and by causing it to distend gives rise to painful and serious symptoms of compression. The effervescence may carry particles of infectious matter into the healthy parts when used in mastoid operations and spread the infection. The author reports several cases illustrative of the untoward effects of the agent when thus carelessly used.—*Revue Hebdomadaire de Laryngologie, etc.*, September 17, 1904.

---

## Department of Ophthalmology.

---

In Charge of DRS. BRUNS AND ROBIN, New Orleans.

---

WITHIN WHAT LIMITS DOES ENUCLEATION PROTECT FROM SYMPATHETIC OPHTHALMITIS? In view of workmen's compensation, Dianoux, *Annales d'oculistique*, T. CXXIX, 1903, p. 443, sets himself to enquire what is the actual protection afforded by removal of an injured eye undertaken before the latter has produced any symptoms of sympathetic disease. A certain number of cases, as he points out, have been published of sympathetic mischief coming on after enucleation of the first eye. Their sum, however, is infinitesimal as compared with the enormous number of enucleations practised. Symptoms, as a rule, make their appearance four to twenty days after the operation. Shaw's case (*Trans. Ophthalm. Society*, Vol. XX, 1900, p. 239) of sympathetic ophthalmitis on the forty-seventh day after enucleation is said by Dianoux to mark the extreme limit yet recorded. The author therefore claims that seven weeks may be accepted as the outside limit of the period of

incubation of sympathetic disease. It is interesting to note that Wecker, Galezowski, Dor, Badal, de Lapersonne, Truc and Valude, to whom a circular letter was addressed by Dianoux, have never observed sympathetic ophthalmitis follow the prophylactic removal of an injured eye.—*Ophthalmoscope*.

---

## Department of Nervous and Mental Diseases.

---

In charge of DR. P. E. ARCHINARD and DR. ROY M. VAN WART,  
New Orleans.

---

OPTIC NEURITIS—Uthoff (*Neurologisches Centralblatt*, No. 20, 1904) analyses 204 cases. Of these 123 cases were caused by brain tumour, 27 by cerebral syphilis, seven each by brain abscess and hydrocephalus, meningitis, cystercus cerebri, sinus thrombosis and anemia each caused two cases; nephritis was responsible for three cases; nephritis and lead intoxication together for one case. In three cases malformation of the head was the only condition present to account for its presence. In four cases no cause could be assigned.

The fact that in none of the 204 cases multiple sclerosis, pachymeningitis, infectious diseases and anomalies of menstruation were noted, speaks for the rarity of optic neuritis as an accompaniment of these conditions.

The author notes that tuberculous meningitis is less likely to cause optic neuritis than a solitary tubercle. The cases occurring with anemia rapidly recovered under treatment.

LUMBAR PUNCTURE IN THE TREATMENT OF AURAL VERTIGO—Babinski (*Neurologisches Centralblatt*, No. 18, 1904) employed lumbar puncture in 106 cases of ear affections and found that it benefited a number of cases. In all but eleven of thirty-two cases of Menière's disease the vertigo was greatly diminished or entirely disappeared.

In cases of deafness and roaring in the ears a few cases were benefited. In conclusion he recommends its trial in cases of ear disease where there are no contra indications and where other means have failed to give relief.

RARE FORMS OF PERIPHERAL PARALYSIS—Seiffer (*Monats. für Psychiatrie und Neurologie* Bd. XVI. H14.) describes a case of double cervical rib, in which were motor and sensory paralyses on the right side. The patient, a girl of 17, first complained of gradually increasing pain in the inner aspect of the right arm. This continued for a year, when weakness and atrophy of the hand muscles appeared, with definite areas of anesthesia on the inner aspect of the arm. The extra ribs were removed by operation. There was up to the time of the report no improvement in the objective signs, but the subjective phenomena had all disappeared.

VERONAL HABIT. Laudenhimer (*Die Therapie der Gegenwart*, 1904, No. 1.) reports a case. Patient, age 50, was addicted to morphin and commenced using veronal for insomnia in the summer of 1903 in doses of 0.5 gram. This was increased until he was taking the drug 3 times daily (about 4.0 grams.) and continued for about 6 months. The most prominent symptoms produced were euphoria and motor weakness and uncertainty. There were no abstinence symptoms on withdrawal. It is interesting to note that the morphin to a certain extent counteracted the euphoria and motor weakness.

---

## Louisiana State Medical Society Notes.

---

In charge of DR. P. L. THIBAUT, Secretary, 141 Elk Place.

OFFICERS—President, Dr. Charles Chassaignac, New Orleans; 1st Vice President, Dr. Oscar Dowling, Shreveport; 2nd Vice President, Dr. L. C. Tarleton, Marksville; 3rd Vice President, Dr. J. F. Buquoi, Colomb; Secretary, Dr. P. L. Thibaut, New Orleans; Treasurer, Dr. M. H. McGuire, New Orleans.

COUNCILLORS—Drs. A. G. Friedrichs, Chairman, 2nd Cong. Dist., 641 St. Charles St., New Orleans; J. J. Ayo, Sec'y., 3rd Cong. Dist., Bowie; P. E. Archinard, 1st Cong. Dist., New Orleans; S. L. Williams, 5th Cong. Dist., Oak Ridge; N. K. Vance, 4th Cong. Dist., Shreveport; C. M. Sitman, 6th Cong. Dist., Greensburg; C. A. Gardiner, 7th Cong. Dist., Sunset.

DR. L. G. LEBEUF has sent the following circular letter:

"As Chairman of the Section on General Medicine for the 1905 meeting in New Orleans, allow me to state that I have chosen the following subject: Acute Pneumonia and Its Modern Treatment.

"To make this more interesting I want to earnestly request you



to keep a tabulation of all your cases of pneumonia this winter—say between December 1 and April 1. Keep a careful record of your cases and report them to me at the end of that time. I would suggest that you keep the notes for this tabulation in this wise: 1. Number of cases treated. 2. A short clinical history: (a) Location of inflammation; (b) course of disease, length of time of illness; (c) variations of temperature; (d) if bacteriologic examinations were made of sputum and results. 3. Treatment: Elaborate on this, giving diet also, if possible. 4. Results: Percentage of mortality.

“You can see how very important such statistical tabulation as this will be to the Society. In compiling my own report I will naturally give full credit to each member furnishing me with data.”

THE PRESIDENT HAS APPOINTED on the committee, whose duty it shall be to report at the next meeting upon the best method of preventing the increase of insanity, Drs. G. A. B. Hays, Clarence Pierson and P. E. Archinard.

---

## Orleans Parish Medical Society Notes.

---

*President*, DR. M. J. MAGRUDER.

*Secretary*, DR. S. M. D. CLARK.

141 Elk Place, New Orleans.

---

On November 12 our Society met for the first time in its new home, 141 Elk Place. It has long been the dream of every administration of this Society for the past twenty years that we should own our home and have quarters to which we would not be ashamed to bring our medical friends. We had a true “house warming” at this meeting. It was a jollification in every sense of the word. The members attended in large numbers and seemed to be in touch with the spirit of the occasion. We had with us many of our senior members, who gave the benefit of short and pithy talks, telling of the history of our Society and the great difficulty encountered in the early seventies, when medical organization was even attempted. Our venerable and talented dean of the Medical Faculty of Tulane University honored the Society by his presence and enlightened and entertained the members by his char-

acteristic talks, which are always so instructive, at the same time humorous. It was a treat, especially to the younger members of the Society, to hear Dr. Chaillé tell of the many obstacles and difficulties experienced by the men of his day in organizing the medical profession. Dr. A. Pettit reviewed in a very thoughtful paper the origin of the society, no one being in a better position or more thoroughly in touch with the history of the society than was he. Dr. Joseph Holt, followed by Drs. F. W. Parham and Rudolph Matas, each responded to calls upon them by the members of the society, making appropriate and pleasing remarks. The occasion, though surrounded by a serious atmosphere, was jolly and spirited. All knew and realized that they were at last in their new home and that the labors of years had been finally crowned with success. The President, Dr. Magruder, made an impromptu appeal to the members, that the home be utilized by every one of them, that it be made the headquarters for all medical discussions and for medical men to meet their friends, pleading that we now had a home and that we should enjoy it. Some delicious punch and refreshment followed the adjournment and every man left the meeting feeling that he had been to a love feast, and, too, felt proud of the quarters.

Anyone reading the report of the Chairman of the Domicile Committee will realize that the final aim of the Society of owning its quarters has not been accomplished without unceasing work on the part of the present and past administration. We have a very attractive and quiet library, in which one can do earnest research work. Our library is growing more valuable each day. One of the distinct advantages of our new home is that we have a lounging room, which all members not desiring to read or study can utilize, thereby leaving the library free from any unnecessary noise. The Secretary's room is well equipped and away from the library proper.

The Ladies' Committee who so generously furnished the rooms have done their work in a most artistic way and the Society, as a whole, feels deeply grateful.

Should any member be in possession of an appropriate picture that he could present to the Society, it would be of great service in finishing some of the rooms not now in use.

Through Dr. Chassaignac, the New Orleans Polyclinic has do-

nated 1400 volumes of medical literature to our already well supplied library.

DR. L. G. LeBEUF, Chairman of the Domicile Committee, made the following report:

Allow me to attest in the beginning of this report to the valuable interest of the President of the Society in this work; he has labored incessantly to bring this to a happy conclusion and your entire committee desires to thank him for his able support.

Your Domicile Committee wishes to report that it has been actively at work since its appointment. We have visited over forty-four locations. We first limited our search, or field, to a *quartier de ville* bounded by Iberville on one side, Gravier on the other, Camp and Chartres to Basin street. Unfortunately the property of that specially desirable district had greatly accrued in value or had gotten in the hands of speculators who required a distinct gain on their investment. The reported early construction, and development, of the Frisco terminals had something to do with that, also, the projected sites of new hotels, the actual building of two new theaters on Iberville street, as well as the construction of the new Court house caused this inflation of values. We had to extend our line of research. In the district spoken of very few houses were for sale and nearly all those were at ten to fifteen thousand dollars. When approached, the owners of the houses expected you to make them a proposition. They never wished to sell and would listen to you, only if your proposition was a good one. So you see, we were met at the very start with the question of finances or resources. We naturally realized at the very start that it was no use to proceed any further if we could not get some cash in sight so we had mapped out a plan which we submitted to the Society, practically on the same lines as the one suggested by your efficient Domicile Committee of last year. As a nucleus to build upon, we had at first \$927.22, the surplus money remaining in the hands of Dr. L. G. LeBeuf, Treas., of the Ent. Committee of American Medical Association, 1903, meeting in New Orleans, to which the Society had added \$72.78 to complete a round \$1,000. Then also the sum of \$277.08 donated through Dr. Matas, also surplus of smoker, of surgical section at same A. M. A. meeting. Both sums were cheerfully turned over to us, for this special Domicile purpose. Since then also, the sum of \$62.50 anonymously

turned in for the same purpose through one of our members. This made a total at the start, plus interest from the bank, of \$1,350.83. As we had seen in the preliminary work of search for a proper location that we could not finance the scheme under \$8,000 we then proposed an issue of first mortgage bonds to cover the balance of the amount necessary. We consulted a competent notary and attorney, and submitted our plans to the fiscal officers of the Bank of Orleans, who promised us their assistance in financing the issue. We decided to adopt the plan which you already know, as this has already been passed upon by both the Board of Directors and the Society as a whole.

In brief review, this plan was the issue of 260 \$25 bonds running sixteen years and bearing 4% interest, said interest payable annually by detachable coupons, from the revenues of the Society or from rentals, if any, of lower floor or other rooms. This bond to be payable in cash at once, or according to the choice of the purchaser, 20% of amount every two months. The bond to be turned over to holders of treasurer's receipts by the Bank of Orleans. As the budget of expenses of the Society had been carefully made during the four preceeding years it was clearly shown that the average healthy surplus of the Society would be about \$350 annually, so that, with the rental of the rooms done away with, we should be able to pay the interest on the bonds and retire yearly, by lot drawings, between 15 and 20 bonds; this without counting on rentals of lower floor or other rooms. We had during three months of investigations taken two options approved of on motion, cabled to England to attempt to secure an option on a most desirable location, and saw many other sites, until we finally agreed upon this present site, which seemed to fulfill nearly all the requirements desired, specially, the one of being reached as easily by the downtown men as well as the uptown men, and being as we may say, in the "*Cercle du Temple*," the "*Quartier Latin*," of the medical center of our city. With the proximity of the Charity Hospital, the Polyclinic, the Medical College, the Hotel Dieu and soon, we hope, the neighbor of the Eye, Ear, Nose and Throat Hospital (new hospital.)

Our building cost us \$5000, we had it bought in, at auction, by a third party, so as not to appear at first in the premises, and thereby raise the price of it. The building was old, and to put it



in proper shape, for the use we wished it, and be able to rent the ground floor as planned by your Committee, it was necessary to make quite an outlay in repairs and improvements. The original owners had it rented to the headquarters of the G. A. R., and the lease expired only on Oct. 1, so we judged it proper to pay them a small bonus to annul the lease in August, so as to be able to hurry up repairs and allow us to occupy our own domicile before the end of the year. To assure the retiring of these bonds, without counting on the Society's revenues from membership dues, your committee began looking around for another source of revenue. That was quickly found, first by consultation with last year's efficient Secretary of the La. State Medical Society, Dr. W. M. Perkins, who agreed to suggest in his report that that Society would rent a permanent domicile with us. This was recommended in Dr. Perkins' report at the last meeting in June and the Society adopted it by resolution, paying us \$10 a month for such room. Then we placed signs and advertised in the papers as much as possible to attempt to rent the lower floor to some proper, desirable tenant. We found considerable difficulty in securing one, until your president conceived the idea of calling with the Chairman of your Domicile Committee, upon all the large wholesale drug and instrument houses in New Orleans, with the proper ground plans of our building and the proposed blue prints of repairs, to attempt to interest them. We very fortunately succeeded in interesting Messrs. Clarke & Kleisdorf, who rented the lower floor from us, taking a lease for twelve months, at \$40 per month, with privilege of renewal at \$50 per month for two more years. They have put up a splendid line of instruments and office furniture fixtures. We trust that their venture will prove successful as it will assure us a permanent tenant at \$600 per year. These two rentals assured us the first year \$600 for the purpose we sought, and probably \$720 the two following years.

I deposited twelve rental notes made by Messrs. Clarke & Kleisdorf at the Bank of Orleans for the first year's lease to the credit of the treasurer and president of the society. Regarding the repairs which had to be done upon our building, we had a very competent architect to draw a plan of the building with the proposed repairs and improvements and asked six or seven of the principal builders in town to submit bids for this work. When the bids

were opened in the presence of your president and our architect and the chairman, we found eleven and that they all varied between \$3000 and \$4000; so we rejected them all as too high and gave the work to Mr. Julius Koch, our architect, who promised to have the work done under \$3000, charging us 10 per cent. for his services. This proved quite satisfactory, and we have the building to submit to your critical inspection. During this time your committee realizing the difficulty of raising more money from a profession which in the last year or two had been called upon so often for subscriptions and contributions, decided to attempt to furnish and decorate these rooms through a committee of ladies composed of the wives, mothers and sisters of the officers of the society and of the members of your Domicile Committee. This was ably organized by your worthy president and under the immediate control of your energetic Librarian, Dr. Homer Dupuy. These ladies have had complete charge of all this decoration work, and if there is anything here which meets your approval in pleasing your eye or satisfying your artistic sense you owe it to this able committee of ladies, who have not only done all this work, but also raised nearly \$300 amongst themselves to meet these expenses.

The reading room behind the Secretary's room, furnished in Mission style, was their idea entirely, and we hope that the touch of home which their presence here has given these rooms, will encourage the entire membership to make this their lounging place, their smoking place, their reading and writing place, where they will meet their brother physicians oftener and in closer intimacy and in this wise raise the standard of the medical ethics in our old city, bringing us in closer relations. We want to suggest that in one of these rooms your librarian will keep a few periodicals of general literature also, like the *Scientific American*, *The Nation*, *Success*, *Current Literature*, or others, so as to attract our members to this new home of theirs. The entire aim of your retiring Domicile Committee is to that purpose. That is the reason of the large gallery, where members can lounge and smoke on summer evenings, the purpose of the smoking, Mission room, the quiet, secluded reading and study rooms on the third floor.

As a recapitulation of the finances allow us to give you this tabulation:

## TOTAL OF MONEY IN FUND.

Amount donated by A. M. A. Arrangement Committee, through Dr. LeBeuf . . . . .	\$ 927.22
Amount total from General Fund to make \$1000.....	72.78
Interest on this \$1000.. . . .	11.25
Amt. donated by A. M. A. Com. through Dr. Matas.....	277.08
Amount donated by Anonymous Friend, through Dr. Matas.. . . .	62.50
Total.....	1,350.83
Plus Bond Issue.....	6,500.00
Grand Total....	\$7,850.83
Number of Bonds subscribed to up to Nov. 9, 1904....	232
Number of Bonds paid in full up to Nov. 9, 1904.. . . .	117
Number of Bonds, part payment made, up to Nov. 9, 1904.....	47
Number of Bonds, no payment made up to Nov. 9, 1904.....	68
Number of Bonds unsubscribed to Nov. 9, 1904..	28

## EXPENDITURES.

Bonus for vacating Domicile before expiration of lease.. . . .	\$ 25.00
Miss Marie O. Shepard, total paid on new Domicile....	5,000.00
Miss Marie O. Shepard, investment on \$4,500 at 5%, after deducting amount due the Society for rent . . . . .	23.25
Mr. Bernard, commission.. . . .	50.00
A. W. Hyatt, printing bonds.....	20.00
J. E. Zunts, attorney's fees.. . . .	25.00
C. T. Soniat, notary fees . . . . .	57.35
C. M. Williams, survey and research.. . . .	8.40
Dr. C. V. Unsworth, commissions . . . . .	23.00
J. Koch, on account for improvements and repair.. . . .	1,500.00
Newspaper advertisements.. . . .	6.00
Total.. . . .	\$6,738.00

Your committee would have liked to have turned over the building without any obligations against it, but as some of the bonds still remain unsubscribed for, and others have been only partly paid, we are not able to do so. Still we wish to announce that the financing of the balance of the matter is very simple, as we have the promise of our bank, to buy these or lend us the money needed, with the bonds as collateral, in case the members do not assume the remaining bonds. We now owe only the second half of the builders' bill, which has not been rendered yet, and we will have nearly the full amount to meet this by the time it is presented.

Submitted by

L. G. LEBEUF, *Chairman.*

---

## Medical News Items.

---

THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION will meet at the Hotel Hilman, Birmingham, Ala., December 13, 14, 15, 1904. The preliminary program presents an excellent list of papers from representative men; the subjects embraced cover a wide field of interest. Dr. C. J. Miller is the only member from New Orleans down for a paper.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION ELECTED THE FOLLOWING OFFICERS at their Cincinnati meeting in October: President, Bransford Lewis of St. Louis; First Vice-President, Frank P. Norbury of Jacksonville, Ill.; Second Vice-Pres., J. H. Carstens of Detroit; Secretary, Henry Enos Tuley of Louisville; Assistant Secretary, John F. Barnhill of Indianapolis; Treasurer, S. C. Stanton of Chicago. Next place of meeting, Indianapolis, Indiana, October, 1905.

ISTHMIAN CANAL COMMISSION SUPPLIES. At the request of the Commission and to facilitate advertisers we announce that: Sealed proposals, in duplicate, will be received at the office of the Isthmian Canal Commission, Washington, D C., until 12 o'clock on the first day of December, 1904, at which time they will be opened



in public, for furnishing INSTRUMENTS, DRESSINGS, ETC. Bidders must state the time they propose to make deliveries. Bids received after the hour of the date specified will not be considered and will be returned unopened. Sample proposal blank may be seen at the office of the JOURNAL.

THE AMERICAN JOURNAL OF UROLOGY HAS MADE ITS APPEARANCE with its October number. It is published by the Grafton Press in New York and is to be edited by Dr. Henry G. Spooner of New York. The editorial board is made up of representative surgeons and specialists in genito-urinary diseases. The initial number contains some able articles by good men and we feel that we may congratulate all concerned upon the promise of the new venture.

PERSONAL:—Dr. A. W. DeRoaldes has returned from his European trip and seems to have found it restful as he is in the best of health and spirits.

Drs. A. Nolte, J. N. Thomas and T. E. Schumpert have been nominated to represent the Louisiana State Board of Health at the Havana meeting of the American Public Health Association, to be held early in January.

Dr. L. M. Provosty, formerly of New Roads, La., has located in New Orleans, where he will practice medicine.

Dr. H. M. Folkes has rebuilt his sanitarium at Biloxi, Miss. While the loss of his property through fire was a calamity, it has given the opportunity to the doctor of erecting a commodious establishment, with modern equipment and conveniences.

Drs. B. A. Pope, Geo. W. Rembert and W. H. Reilly have returned from their vacation.

THE FOURTH PAN-AMERICAN MEDICAL CONGRESS which will convene in Panama the first week in January next, bids fair to be a most delightful midwinter trip. The delegates will leave this country by the Atlantic, Pacific and Gulf Coasts the last week in December. They will return by the same routes, or will make round trips.

The Public Health Association meeting will take place on the following week in Havana, and those desirous of attending both meetings can arrange to do so.

There are two routes for the physicians to take from Panama

to Havana. The first is by way of Jamaica to Santiago de Cuba by boat and overland by rail to Havana. The second is by water from Panama to Vera Cruz and from there to Havana. The former will probably be the most pleasant trip.

From Havana, the return trip can be made directly north to New York by water or via Miami or Tampa, Florida; or New Orleans. The connections and dates of sailing are now being arranged.

The Panamanian Government has appropriated \$25,000 for the Scientific Session and the entertainment. The Congress will be held from the second to the sixth of January. The afternoons will be devoted to the Scientific Sessions and the mornings and evenings to trips and social functions. So far as can be learned, the program in Panama will be a reception on the first day, by President Amador, of the Panama Republic, and the formal opening session of the Congress the same evening. On the second day, an excursion to the Canal in the morning, meeting of the various sections in the afternoon, and a banquet in the evening; on the third day, an excursion down the Bay to Taboga Island, where a Panama breakfast will be served, scientific sessions in the afternoon and a ball in the evening. On the fourth day, an excursion to the U. S. army barracks in the morning, section meetings in the afternoon and the formal closing session in the evening. On the fifth day, an excursion to the plantation of the United Fruit Company; and on the afternoon of this day, those of the congresistas who intend going to Cuba to attend the meeting of the Public Health Association will sail for Jamaica, while those who intend going by way of Vera Cruz, or returning home by way of New Orleans, or New York, will remain until the following Tuesday.

The Secretaries of the Sections of the Congress for the United States are: Drs. A. H. Doty of New York, Hygiene and Quarantine; Judson Daland of Philadelphia, Medicine; R. Matas of New Orleans, General Surgery; Bert Ellis of Los Angeles, Eye; Hudson Makuen of Philadelphia, Throat; Frederick Jack of Boston, Ear; C. H. Hughes of St. Louis, Nervous Diseases; Geo. Goodfellow of San Francisco, Military Surgery; John Ridlon of Chicago, Orthopedic Surgery; C. G. Kerley of New York, Pediatrics; Noble P. Barnes of Washington, Therapeutics; Walter Chase of Boston, Pathology; D. W. Montgomery of San Francisco, Dermatology.

Communications from physicians in the United States, interested in these branches, can be sent directly to these different Secretaries. Delegates intending to attend the Congress, desirous of obtaining information concerning it, should communicate with the Secretary of the International Executive Committee in the United States.

**SURGEONS AT PAN-AMERICAN CONGRESS:**—Dr. Rudolph Matas, Secretary of Section of General Surgery for the United States, asks those who wish to contribute papers to send titles to him at No. 2255 St. Charles Ave., New Orleans. He also announces that the United Fruit Company's Agents are offering as a special inducement to American "*Congresistas*" a reduction of the regular fare for the round-trip from New Orleans to the Isthmus to \$50, that is, \$25 each way.

The steamers leave New Orleans every Friday; a special steamer will leave New Orleans in time for the opening of the Congress, sailing on December 28, 1904, at 10 a. m. It takes about four and one-half days to reach Colon and seven days on the return trip on account of a stop-over at Port Limon, where ample opportunity is given tourists to visit San José, the beautiful Capital of Costa Rica—"the Paris of Central America"—where the most picturesque tropical scenery can be seen at this season, under the most favorable conditions.

In view of the advantages offered by the United Fruit Company, many even from the North and East will, no doubt, prefer the route via New Orleans. Those from the South and West will, of course, find it much preferable to come this way. Reservations must be made not later than December 22, either at the office of the company or through Dr. Matas.

**THE GRAND PRIZE FOR PHARMACEUTICAL PREPARATIONS** at the Louisiana Purchase Exposition was awarded Messrs. William R. Warner & Co. The JOURNAL is pleased to offer congratulations.

**BOARD OF PHARMACY.** At the regular examination, November 4 and 5, the following passed successfully: G. W. Gates and C. M. Daspit; as qualified assistants, H. R. Anderson and D. E. Sconza and W. C. Jackson. The next examination will take place in February, 1905.

**THE TRI-STATE MEDICAL SOCIETY** of Texas, Arkansas and Louisiana met in Shreveport, November 16, with Dr. J. R. Dale

of Texarkana, as president. The third Monday in November was fixed as the annual meeting date, and Shreveport was named the permanent domicile of the Association, with provision for occasional meetings elsewhere. The Secretary reported a membership of 75. A number of papers were read, and officers were elected for the coming year with the following result: Dr. J. R. Dale of Texarkana, Pres.; Dr. T. E. Schumpert of Shreveport, Vice-Pres., for Louisiana; Dr. Z. E. Vaughan of Waskon, Vice-Pres., for Texas; Dr. T. F. Kittrell of Texarkana, Vice-Pres., for Arkansas, with Drs. L. Abramson and I. M. Callaway of Shreveport, Sec'y. and Treas., respectively.

THE TRI-STATE MEDICAL ASSOCIATION of Tennessee, Arkansas and Mississippi adjourned November 17, electing the following officers: President, Dr. H. L. Sutherland, Mississippi; Vice-Presidents, Dr. J. A. Christer, Yazoo City, Miss., Dr. W. H. Deadrick, Maritana, Ark., and Dr. W. A. Young, Atoka, Tenn.; Secretary, Dr. Richmond McKinney, Memphis; Treasurer, Dr. Marcus Haase, Memphis. The meeting was largely attended and a number of papers were read. The association will meet next year in Memphis.

NEW ORLEANS SANITARIUM. Dr. E. D. Friedrichs has been appointed Resident Physician to succeed Dr. M. H. McGuire who recently resigned.

THE NEW ORLEANS POLYCLINIC opened November 7. The attendance during the month has been increasing.

MARRIED: On September 21, Dr. F. W. Jelks of Hot Springs, and Miss Una Ledwidge of Little Rock. Dr. Jelks will be pleasantly remembered in New Orleans, having spent several months here in attendance at the New Orleans Polyclinic.

PERSONAL: Dr. E. O. Trahan of Whitecastle, had the misfortune to lose his residence by fire. The doctor and Mrs. Trahan were away in St. Louis at the time of the fire. Mr. Wire and his little son who were in charge of the house were burned in the conflagration.

DR. ROBERT KOCH will retire October 1 from the position of Director of the Insitute of Infectious Diseases, at Berlin.



## Book Reviews and Notices.

---

*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

---

*Lectures to General Practitioners on the Diseases of the Stomach and Intestines.* By BOARDMAN REED, M. D., E. B. Treat & Co., New York, 1904.

It might be argued that we have many works on the above subjects. Why, another? It pleases us to say that we know of no other work of its kind in the English language which is at the same time so compact and thorough, and which so well fulfils the requirements of the general practitioner as the volume here reviewed. The book is not a mere compilation from other works, although they have been drawn upon and given credit where credit is due them, but it contains the ripe experience of a close observer and long time practitioner of medicine. It has been the aim of the author so to simplify his matter that any properly trained physician can readily make use of the information imparted. This is particularly true of the chapters (lectures) on the qualitative and quantitative examinations of the stomach contents, and also of those on the examination of feces and the blood in gastro-intestinal diseases. The remedial value of active exercise as an aid to digestion, especially to those engaged in sedentary work, is emphasized. That very important, but much neglected, branch of treatment—the proper diet for cases of gastro-intestinal diseases—is well presented. This book was written primarily for the general practitioner, and it fulfils its purpose. STORCK.

---

*The Practical Medicine Series of Year Books.* Edited by GUSTAVUS P. HEAD, M. D., volume VIII.—*Materia Medica and Therapeutics, Preventive Medicine, Climatology, Suggestive Therapeutics, Forensic Medicine.* Edited by GEORGE F. BUTLER, PH. G., M. D.; HENRY B. FAVILL, A. B., M. D.; NORMAN BRIDGE, A. M., M. D.; DANIEL R. BROWER, M. D.; HAROLD N. MOYER, M. D. The Year Book Publishers, Chicago, July, 1904.

To the conscientious, busy practitioner, anxious to keep informed of the things of worth suggested and introduced into medicine during the year, this volume will be of considerable benefit. After a careful perusal of this work, it is fair to assume that little of use to the practising physician has been omitted. STORCK.

---

*Toxicology.* A Manual for Students and Practitioners. By EDWIN WELLES DWIGHT, M. D.

This volume of the *Medical Epitome Series* contains such information upon the subject of toxicology as should be embraced within the knowledge of every physician. The volume is small and handy. STORCK.

*Qualitative Analysis Brief.* By ALLARD MEMMINGER, M. D. P. Blakiston's Son & Co., Philadelphia, 1904.

The brief was written especially for Dr. Memminger's classes in qualitative chemical analysis. The student will find this a convenient guide to follow, as it is accurate and concise.

STORCK.

---

*Non-Surgical Treatise on Diseases of the Prostate Gland and Adnexa.*  
By GEORGE WHITFIELD OVERALL, A. B., M. D. Marsh & Grant Co., Chicago.

The title of this little volume of itself shows its scope and purpose. It is useful in counterbalancing the influence of many who are so enthusiastic in the use of the knife. The author is a great believer in the effects of cataphoresis and electrolysis. In the appendix, he imparts valuable information to the beginner about electro-physics. Some careful proof-reading is indicated if a second edition is to be issued.

C. C.

---

*The Medical News Visiting List.* Lea Brothers & Company, Philadelphia and New York, 1905.

This excellent pocket visiting list is offered once more by Lea Brothers. It comes in four different styles, includes numerous useful tables and is sold reasonably through dealers or directly by the publishers by mail.

---

*Physician's Pocket Account Book.* By J. J. TAYLOR, M. D. The Medical Council, Philadelphia.

A complete financial record for the physician's use. May be carried in pocket, yet all entries can be made in full so as to stand every legal test and all is in one book, accounts being transferred only when book is full.

---

*Visiting and Pocket Reference Book for 1905.*

The tables are numerous and comprehensive. This very complete Call Book will be furnished by the Dios Chemical Co., of St. Louis, Mo., on receipt of 10 cents for postage.

---

*Practical Treatise on Genito-Urinary and Venereal Diseases.* By ROBERT W. TAYLOR, A. M., M. D. Lea Brothers & Co., New York and Philadelphia.

This is the third edition of a practical, modern and compact treatise, the two other editions of which we have heretofore heartily recommended. Gonorrhea and syphilis both are comprehensively and exhaustively considered. Operations on the genito-urinary organs are happily described and non-surgical treatment has received adequate attention. The hope expressed by the author in his preface is destined, we believe, to be fulfilled, to-wit: "That it will prove a satisfactory and trustworthy guide for practitioners of medicine and students who desire information upon the subjects therein considered."

C. C.

*Diseases of the Nose, Throat and Ear.* By SETH SCOTT BISHOP, M. D., D. C. L. F. A. Davis Company, Publishers, Philadelphia, 1904.

This work is a third edition of Bishop's original publication on Diseases of the Ear, Nose and Throat which was received with favor. This edition has been thoroughly revised, several chapters condensed, a new chapter added, with the more recent views and discoveries brought to notice. Special attention is given to modern equipments and to such important subjects as diphtheria, serum therapy, mastoid disease and hay fever. The work is a decided improvement on the first edition and is a valuable addition to the library of the specialist or the general practitioner.

DE ROALDES & KING.

---

*A Manual of Experimental Physiology.* By WINFIELD S. HALL, PH. D., M. D. Lea Bros. & Co., Philadelphia and New York, 1904.

Aside from the interest attaching to a clear presentation of the technic employed in studying the human functions, the present work is notable for the care in detail and in the method followed.

Elementary ideas of physics and of natural history are built upon to develop the basis of study in the animal and then in the human. Modern laboratory principles are fully presented and illustrated and each of the physiologic functions of the body is carefully and graphically discussed.

Both as a guide and a text the book is complete and lucid. DYER.

---

*Blood-Pressure as affecting Heart, Brain, Kidneys and General Circulation.* By LOUIS FAUGERES BISHOP, A. M., M. D., E. B. Treat & Co. New York, 1904.

Considerable attention of late has been directed at the "Blood Pressure" and a timely dissertation is acceptable. Dr. Bishop here presents an essay on the condition of the times and on the tendency of the individual to produce that state which leads to increased blood pressure. The little book is full of practical argument and carries as well some suggestions for the remedy of the affection treated.

DYER.

---

*Normal Histology.* By EDWARD K. DUNHAM, PH. D., M. D. Third Edition; Revised and Enlarged. Lea Brothers & Co., New York and Philadelphia, 1904.

This is a book of about 300 pages, dealing with normal histology and is intended by the writer as an introduction to the study of pathological histology. The descriptions are short and concise. The subject matter is accurate, though in some places accuracy has been sacrificed to conciseness. The book contains a number of good illustrations.

There is a closing chapter on the methods of preparing tissues and sections.

VAN WART.

---

*The Physicians' Visiting List for 1905.* 54th year. P. Blakiston's Son & Co. Philadelphia.

This handy volume again appears offering its own recommendation in usefulness and convenience for daily use to the busy practitioner.

---

*Reference Handbook of the Medical Sciences*, Vol. VIII. Edited by ALBERT H. BUCK, M. D. William Wood & Co., New York, 1904.

This is the last volume of this most valuable reference work and monumental contribution to medical progress. Altogether the Reference Hand-



book presents the highest authoritative information on all topics of medicine and surgery in each of their branches and for some time to come the several volumes must serve a broad and useful purpose for workers in medical fields.

The present volume in review in nowise suffers in comparison with those preceding it. Especially notable articles are those on the Urine, Uterus and Vaccination. The article on Yellow Fever has been written by Dr. Charles J. Finlay of Havana and is particularly interesting for its review of experimental work in this disease. A very comprehensive index to the Handbook is printed with this volume which completes the work.

DYER.

---

*Beauty Through Hygiene*, by EMMA E. WALKER, M. D. A. S. Barnes & Co., New York, 1904.

This little book is one of the "Woman's Home Library" series and should fulfil its purpose as a guide to the care of young girls and women. Exercise, diet, breathing, care of the body, bathing, etc., are considered in readable chapters, well printed and well edited. In almost every page there is some excellent practical note bearing on the everyday life of a woman. The chapters on the functions are replete with common sense and applied intelligence. There is no doubt that Dr. Walker's work will be widely appreciated.

DYER.

---

*Lea's Series of Medical Epitomes—Nagel's Epitome of Nervous and Mental Diseases*, by JOSEPH DARWIN NAGEL, M. D., Lea Brothers & Co., Publishers, Philadelphia and New York, 1904.

This volume on nervous and mental diseases belongs to the class of small books intended more for examination purposes than for a foundation of an accurate knowledge of the subject. The section on neurology in so far as it relates to the symptomatology is correct, but one finds many old ideas in the pathological section.

The section on treatment is marred by including methods which are no longer in use, as nerve stretching for epilepsy. The chapters on mental diseases from lack of any system of classification would be rather confusing to a student studying for the first time this at best difficult subject. Under the heading, Rarer Forms of Insanity, one finds no less than 21 distinct forms described, not including the large number of commoner forms previously described. In a book of this type these would better have been included under the more common groups.

VAN WART.

---

*Practical Electro-Therapeutics*, by FRANKLIN B. GOTTSCHALK, M. D. T. Eisele, Chicago, 1904.

There is more of solid information in the 325 pages of this little work than is to be found in many more pretentious works. The several subjects are treated very plainly and simply presented. The chapter on the X Ray apparatus and its application is the clearest, if not the best, we have yet read. Besides a clear text, there are a large number of illustrations, all graphic, prepared by the author for the work. This little guide must be read by everyone interested in Electrotherapy.

DYER.



## Publications Received.

### YEAR BOOK PUBLISHERS, 1904.

*Practical Medicine Series of Year-Books. Vol. VIII. Materia Medica and Therapeutics Preventive Medicine; Climatology; Suggestive Therapeutics; Forensic Medicine.* Under the general editorship of Dr. Gustavus P. Head. Edited by Dr. Geo. F. Butler; Dr. H. B. Favill; Dr. Norman Bridge; Dr. D. R. Brower and Dr. H. N. Moyer.

*Practical Medicine Series of Year-Books. Vol. IX. Physiology, Pathology, Bacteriology, Anatomy, Dictionary.* Edited by Dr. Gustavus P. Head; Dr. W. A. Evans, Dr. Adolph Gehrmann and Dr. Wm. Healy.

*Practical Medicine Series of Year-Books. Vol. X. Skin and Venereal Diseases; Nervous and Mental Diseases.* Under the general editorship of Dr. Gustavus P. Head. Edited by Dr. W. L. Baum and Dr. H. T. Patrick. Frank F. Lisecki, New York, 1904.

*The Surgical Treatment of Bright's Disease,* by Dr. G. M. Edebohls.

**E. B. Treat & Co.,** New York, 1904.

*Blood Pressure Affecting Heart, Brain and Kidneys and General Circulation,* by Dr. Louis F. Bishop.

**P. Blakiston's Son & Co.,** Philadelphia, 1904.

*A Treatise on Bright's Disease and Diabetes,* by Dr. James Tyson.

*Text-Book of Human Physiology,* by Dr. L. Landois.

*Kirke's Handbook of Physiology,* by Dr. W. D. Halliburton; 19th Edition.

*Qualitative Analysis,* by Dr. Allard Menninger, 2nd Edition.

*Quiz-Combends-Medical Latin,* by W. T. St. Clair, A. M. 2nd Edition.

*The General Catalogue of Medical Books.*

*The Physician's Visiting List for 1905.*

*The Art of Compounding,* by Dr. Wilbur L. Scoville.

**Lea Bros. & Co.,** Philadelphia & New York, 1904.

*Medical Epitome Series, Toxicology.* Dwight-Pederson.

*Manual of Experimental Physiology,* by Dr. Winfield S. Hall.

*A Text-Book of Practical Therapeutics,* by Dr. Hobart Amory Har-  
10th Edition.

*Medical News Visiting List for 1905.*

**J. B. Lippincott & Co.,** Philadelphia, 1904.

*International Clinics. Vol. III.* By leading members of the medical profession throughout the world.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)  
FOR OCTOBER, 1904.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	9	1	10
Intermittent Fever (Malarial Cachexia) .....	4	5	9
Small Pox.....			
Measles.....			
Scarlet Fever.....			
Whooping Cough.....	1		1
Diphtheria and Croup.....	1	2	3
Influenza.....			
Cholera Nostras.....			
Pyemia and Septicemia.....		1	1
Tuberculosis.....	51	44	95
Cancer.....	16	6	22
Rheumatism and Gout.....			
Diabetes.....	4	1	5
Alcoholism.....	1		1
Encephalitis and Meningitis.....	6	1	7
Locomotor Ataxia.....	1		1
Congestion, Hemorrhage and Softening of Brain.....	16	4	20
Paralysis.....			
Convulsions of Infants.....	3	1	4
Other Diseases of Infancy.....	16	8	24
Tetanus.....	1	7	8
Other Nervous Diseases.....			
Heart Diseases.....	32	28	60
Bronchitis.....	5	1	6
Pneumonia and Broncho-Pneumonia.....	8	13	21
Other Respiratory Diseases.....	1	3	4
Ulcer of Stomach.....	1		1
Other Diseases of the Stomach.....	3	2	5
Diarrhea, Dysentery and Enteritis.....	20	8	28
Hernia, Intestinal Obstruction.....	1	2	3
Cirrhosis of Liver.....	9	2	11
Other Diseases of the Liver.....	2	2	4
Simple Peritonitis.....		1	1
Appendicitis.....	3	1	4
Bright's Disease.....	37	20	57
Other Genito-Urinary Diseases.....	2		2
Puerperal Diseases.....	2	5	7
Senile Debility.....	17	10	27
Suicide.....	3		3
Injuries.....	20	16	36
All Other Causes.....	10	4	14
<b>TOTAL.....</b>	<b>306</b>	<b>199</b>	<b>505</b>

Still-born Children—White, 23; colored, 26; total, 49.

Population of City (estimated)—White, 233,000; colored, 84,000; total, 317,000.

Death Rate per 1000 per annum for Month—White, 15.76; colored, 28.33; total, 19.11.

## METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure..... 30.03  
Mean temperature..... 73.  
Total precipitation..... 1.20 inches.  
Prevailing direction of wind, northeast.

# *New Orleans Medical and Surgical Journal.*

---

VOL. LVII.

JANUARY, 1905.

No. 7.

---

## Original Article.

---

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints may be had at reasonable rates if a **Written** order for the same accompany the paper.]

---

### Contract Medical Practice\*

By B. A. COLOMB, M. D. Union P. O. La.

The original purpose of contract work was evidently to provide the very poor with medical attention at a minimum price. From this it extended to aggregations of individuals, known as societies, and to corporations, educational institutions, etc. In fact, wherever a number of individuals were under one controlling influence. Physicians in ante-bellum days were allowed so much per year for attention to planters' slaves. It would be manifestly impossible to pay the medical men of the army or navy other than fixed salaries, but the extent of their work is well defined as to numbers and locations, with a substantial increase in the event of active service.

The abuses of this system began to creep in when those who were able to pay a reasonable amount availed themselves of something intended for the very poor, and the purchaser of medical services

---

\*Read at the December Meeting of the St. James Medical Society.

was allowed to fix the rate of compensation. The custom, in so far as individuals are concerned, has become obsolete, and been abolished wherever medical men had the moral courage to put a quietus on it. I dare say there are very few places in this great country of ours where family contract practice exists as it does here in Louisiana.

The original fixed rate for family and individual work in this vicinity when I first shied my castor into the ring was as follows: Five dollars per head per year, when the family was small; four dollars when of average size, and three dollars per head when numerous. Of late years "any old price" is good enough, depending only upon the amount of pressure the doctor can stand and the patient bring to bear. I have known a family of ten to have medical attention for an entire year at one dollar each.

The society practice, which flourishes mainly among the negroes, sifts itself down to making visits at half price. The members can generally employ any physician, provided only they cost the society its regulation fee, which is usually half the regular rate. Any laborer who is paying two dollars per visit today can have the same services tomorrow, provided only he join a society in the meanwhile. These societies are always controlled by one or two men, and the physician allowing them the most graft becomes the regular medical attendant, gets the bulk of the work and has his bills paid more promptly than the others. The "fake" examinations to which the applicants are subjected is another evidence of medical degeneracy, if I may use this term. A society has ten applicants for so-called examinations and invites bids for the job lot. These range from fifty cents to two dollars per head—the fifty-cent examiner is only required to "see" the applicant.

A safe rule in the financial world is that one gets usually what he pays for. He sometimes gets less but never more. If patients think they receive the best services a man can give when he knows he is not half paid for his work then their knowledge of human nature must be very superficial indeed. I would like to ask any physician who should receive two simultaneous calls, the one at five dollars per year and the other at three dollars per visit, as to the direction he would take. In a country like this where everybody is tied up by medical contracts a man who has none is in a bad way, unless he has some qualification out of the ordinary to recommend him. He must live largely on the mistakes and the



failures of others; take cases they have failed to cure, and send them around as a living evidence that he does better work and is entitled to better pay. His practice being limited he can give each case proper attention and be successful, where the over-busy man has made a faulty guess from lack of time. The privilege of refusing practice under certain conditions is a great advantage to the man who does no contract work. Cases at a distance, for instance, he can take or leave as he may be inclined, depending upon his ability to give them the necessary attention. Physicians who do contract work are generally anxious to tie up families living at a distance because they are within easy reach of other practitioners. While this is legitimate, as much so as any other contract work, it is hardly just to one's confrères.

I do not think there is a man within the sound of my voice, nor within the reach of my pen, who would not gladly give up every vestige of a contract if he was assured that his own revenues would not suffer and his neighbor's be benefited. Every physician admits the evil of the system, yet none has the moral courage to abandon it. If the question of practice be considered in a broad and liberal way it becomes evident that no one could possibly suffer. The general results would be less work and better work and a fair remuneration, with a feeling of satisfaction on the part of both, the patient and the physician. The most competent man would certainly get the most practice, but he gets it anyway and always will get it. As a rule the best physicians in a community do no contract work, but prefer to compete in the open market for a living. They may have done this kind of work at the start, but drop it just as soon as they are financially able to do so. It is to the older and well-established men in every community that we must look for the eradication of this pernicious system. They should have settled revenues from their clienteles, and money set aside, and be in a position to stand some slight jar upon their finances. Whereas the young man coming into a community finds everything tied up and he is in no position to set reforms in motion; he is just "bleeged to climb dat tree." And it is just these old settled practitioners in every community, who are living on the "shady side of easy street," that hold on to every "smidge" of practice that has one dollar in it.

In every trade and calling compensation is in accordance with the quantity and quality of work done. Even day laborers come under this rule. Will anyone contend that he does contract work

for humanitarian reasons—because it enables the public to get the results of his labors for the least money? Doctors are made from the same kind of stuff that other people are—especially in this commercial age—and the question is simply one of dollars and cents. Bills can always be made proportionate to the means of a patient and nobody needs a contract to do charity work. Why should a man worth thousands pay the same for his medical attention that a common laborer does? He wants more and better service, is harder to please, takes up more time, is more exacting in every way, and does not pay any more quickly. Why should the family physician plod along year after year treating families for fifteen or twenty dollars, who plunk down that amount to a specialist for one consultation. People are generally valued at the price they may set on themselves, particularly if they rate their services at nothing, will they be regarded as ciphers. There is no stimulus that spurs a man on to do his very best like knowing that the results of his skill are all he can count upon to make him a successful bread-winner. Through contract work a year's business is clinched on January 1st and the stimulus of competition ceases from that time on.

The two factors that appeal to laymen in this kind of work are cheapness and long-deferred payments, both of which are to be condemned. If we look at the questions from a purely business standpoint, it is absolutely indefensible. Contracts are taken for a year and a physician cannot collect a cent from them until the twelve months have expired. Everything accumulates for January 1st. Obstetrics, extraction of teeth, surgical work, when extra, and medicine also, in case the physician should supply them. Many patients can and will pay a small amount monthly who find it impossible to pay down a lump sum at the end of the year; and the result of long accounts is either a tail left over or a reduction of the bill. Besides, how is the physician living during this time and paying for his medical supplies? The man who does this kind of work is living usually on the year plan himself, and paying a large advance on the cost of living and trusting that he may be able to "square up" at the end of the year. In many places, and particularly in farming districts, people run yearly accounts for their supplies, as they get in money only when their crops are sold. Successful farmers, however, like all other good business men, should realize that financial relations improve in mutual benefit

as they approach a cash basis. There are always, in every community, salaried individuals and people of means who can pay at any time, and if these settle their other bills at short intervals there is no reason why the physician should go unpaid.

Another phase of this question is the stupendous undertaking of collecting several hundred bills in a limited time. During December and January when the days are short, the roads heavy, the weather bad and the usual medical routine going along, there comes the additional task of making out and delivering and collecting several hundred bills. I doubt if there is a member of this society who employs a collector—the fees do not justify it. If these bills could be distributed throughout the year, the work would be much less burdensome, and the advantages very great to both patient and physician.

A continual source of misunderstanding in contract practice is the kind of services included under this term. Vaguely, surgical, obstetrical and gynecological work are considered to be extra. Contractors, however, will object usually to additional pay for any minor surgery, for the treatment of venereal diseases and for gynecological treatment, other than operations. There is a continual effort on the part of patients to include as much as they can, and the physician is under a never ending strain to protect himself from additional imposition. As he is one against many, the result is a gradual yielding on his part, until his extra work is worn away to nothing. Early abortions, venereal diseases, doubtful fractures and all minor surgical work have been the most frequent cause of disagreement in my experience.

The simple verbal contracts that obtain in this section are of no value from a legal standpoint, and a patient can drop a physician, or vice versa, and neither have any redress. Contractors also have a way of moving about and expect you to follow them, or the entire family may go out of reach for six months and want you to reduce your bill one half. The arrival of a new member in the course of the year is another cause of trouble. The infant is so small, he is considered a kind of "lagniappe," and the doctor is required to give him a free pass until the year is out.

A serious state of affairs arises when a physician having a large contract practice at low rates and much society work at low rates also, is compelled to abandon his practice for a time. His confrère may have no contract work and charges regular fees. Is it ethical



for this man to take up the work of his disabled confrère and carry on his contracts and society work at half price, when he would not do that kind of work for himself? What influence would it have on the clientele of the man who is trying to uphold the dignity of his profession and keep it out of the ranks of a pettifogging trade? What position would the contract physician find himself in, if his confrère should avail himself of his absolute privilege to charge full rates for all work, the same to be paid out of the contract physician's revenues? I do not think any physician is ethically bound to take up the burden of his confrère when this is such as he himself has felt constrained to refuse, considering it detrimental both to himself and to his profession.

Work done for corporations or educational institutions at a fixed price is very different from the same kind of work done for societies or individuals. In the first instance all the patients are either under one roof or within easy reach, and the pay is certain and at short intervals monthly or quarterly, whereas, members of societies and families are spread all over a community and the physician must expend both time and money in getting to them. Members of societies become delinquent and the physician is not notified. These bills are lost and societies cannot therefore be classed as certain pay. Families and individuals pay not better as contractors than as regular pay patients, and a dishonest man can secure the services of a physician for twelve months on the contract plan, which he could not do in any other way. In dealing with educational institutions and corporations that assess a stipulated amount from each student or laborer, it is just and proper that the physician doing this work should exact the total amount so collected. As a general rule this is not done, but a certain amount is paid to the physician and the remainder is assimilated—benevolently assimilated by the other party.

I have tried to set forth some of the difficulties that beset our profession here at home. I have been all along the road, and found it rough and growing rougher, so that I concluded to try some other way. The average man will pay a fair price for good service and remain satisfied. If he can get the same service for little pay he will take it. He may try the bargain counter for a while but not for any length of time. It is my candid opinion that all contract work, except for institutions and corporations, could be abolished by the members of this society without the least financial or other



injury to any member of it. I believe further that the people who employ us would be the main beneficiaries of such a course, both medically and financially. They understand the questions involved, (otherwise a certain class of medical men would have starved to death long ago), and will do away with job lot practice themselves when a better article makes its appearance. It is not my purpose to bring any element of discord into this society. The views expressed in this paper are my honest opinions and those that guide me in my dealings with the public. No physician can expect to retain the good will and the patronage of people in any community unless he deals fairly with them. If he be unscrupulous and inclined to take advantage of them no verbal contract is any protection. If he be honest and inclined to do the right thing always no contract is necessary. He is best able to equalize the burden of his support if unfettered by any fixed rate of compensation. All of his time is not taken up with the trivial ailments of humanity, and he has leisure to attend his local society and do his part towards making it of benefit both to himself and to the profession at large. He has spare moments for self improvement and does not, after ten years of practice, lapse into a back number and see some up-to-date youngster come along and step into his shoes.

---

---

## Clinical Reports.

---

### Why So Many Eyes Are Lost.

By H. M. FISH, M. D., New Orleans, La.

The uveal tract, consisting of the choroid, ciliary body (muscle) and iris, is the vascular tunic of the eye, hence the principal source of the internal nourishment. Any condition interfering with the normal circulation causes hyperemia (active or passive ) disturbs its trophic function and results in pathologic changes, iritis, cyclitis, cataract, choroiditis, fundal edema, opacities in the vitreous, etc. The cause of internal eye disease, in a great many instances, is unknown. When this condition arises in a patient free from tuberculosis, specific disease, gout, etc., when an otherwise healthy individual, from no known cause, and it may be suddenly, becomes

affected with an iritis or iridocyclitis, the case is termed "obscure," the idiopathic variety of Fuchs, Fox, Silex and other writers. In this country, where specific disease is not so prevalent as in Europe, these obscure cases are in the majority. The cases published with a known etiology are generally the authors' isolated cases. One has but to look over the papers on this subject read before the Ophthalmological Section of the American Medical Association, Saratoga Meeting, 1902, and their discussion, to see how seldom the cause is really definitely known and how frequent all therapeutic measures fail entirely. A great many eyes so afflicted linger along for weeks or months, and in the end lose useful if not almost entire vision in spite of all treatment. A restoration to normal of an obscure case of iridocyclitis is a great exception, as no therapy can be effective or rational when the etiology is unknown. Because of this frequent failure to ascertain the cause it is often attributed to seemingly remote conditions, tuberculosis, fever anemia, menstrual trouble, intestinal disorders, etc. A case was recently reported by Bruns and Robin (*New Orleans Medical and Surgical Journal*, June, 1904), in which uveitis was attributed to high, uncorrected, myopia.

Ziem advanced the hypothesis in 1888 (*Ueber Einschränkung des Gesichtsfeldes bei Erkrankuncken der Nase und ihrer Nebenhöhlen*, *Berlin klin. Wochenschrift*, 1888, No. 37, und *Deutsche med. Wochenschrift*, 1889, No. 5) that accessory sinus inflammation causes a passive orbital hyperemia and reported improvement and cure in cases of internal eye disease by treatment of the affected cavity, being the first to show the relation of cause and effect. At the recent International Congress of Ophthalmology, Lucerne, September 13-17, I reported six cases of internal eye disease due to accessory sinus disease and the results obtained by syringing the cavity. Abstracts only are given here:

Case 1. Keratitis punctata (a precipitate of inflammatory products on posterior layer of the cornea) opacities in the vitreous, choroiditis and fundal edema of several weeks' standing. Vision improved from 1-10 to 1-4.

Case 2. Keratitis punctata, opacities in the vitreous and fundal edema of three or more weeks. Vision from 1-10 to 1-2. Degenerative changes in the macular region, present at the time of the first examination, prevented a possibly perfect result in the above two cases.

Case 3. Severe irido-cyclitis, ciliary injection, abundant keratitis punctata, iritic adhesions to lens capsule, fierce trigeminal pains or "ciliary" neuralgia, marked loss of vision. On establishing a flow from the cavity the typical "iritic" (?) pains ceased at once, and eight days later the patient was dismissed, all parts and vision restored to normal.

Case 4. Hyperemia of the iris (sluggish pupil), ciliary body (recession of the near point and choroid (hyperemic disc). Vision 1-2. Four days later vision and parts normal.

Case 5. Injection of ciliary veins, hyperemia of iris and ciliary body and a circumscribed subretinal choroidal exudate. Vision 1-10. In four days vision and all parts normal. Only two other cases of subretinal exudate (detachment) due to frontal sinusitis have been published, one by Kuhnt (*Über die entzündlichen Erkrankungen der Stirnhöhlen und ihre Folgezustände*, Wiesbaden, 1895. Case 17, p. 120), with vision reduced to ability to see moving fingers; the other one by Bræckært (*Opacités du corps vitré et décollement rétinien à la suite de sinusite ethmoïdo-frontale*, *Revue de Larynx*, 1901, p. 14), vision in lower half only of the field, which means that the upper half of any object looked at is not seen. The defective vision in both cases is necessarily permanent.

Case 6. Slight iritic adhesions, abundant vitreous opacities. Vision less than 1-10 for many weeks. Eight days after treatment vision 1-4, and three weeks later ability to read the paper "as good as ever." Vision 2-3—3-4.

A seventh case of old disseminated choroiditis, the result (probably) of a sinusitis, after being told that his vision could not be improved, went to another ophthalmologist for treatment. The case is interesting from an etiological standpoint only. The above seven-case histories are to appear in full soon in a German and also in an American eye journal. They are not isolated cases, selected from a large clinical material, but represent seven out of eight consecutive cases; the remaining one was a severe iridocyclitis that went on to destruction in spite of all I could do. I never examined the nose, as then I did not know the intimate causal relations between the two conditions.

On careful search of Nagle's *Jahresbericht über Fortschritte d. Ophthalmologie* (year-book) and study of the literature, I find, in addition to the cases of Ziem and Kuhnt, about forty others, the

earliest one by Welge in 1786, cited by Berger and Tyrman (*Die Krankheiten der Keilbein-Höhle und des Siebbein-Labyrinthes*, Wiesbaden, 1886, p. 18.) All of these cases, however, with the exception of Schmiegelow's (*Über der Beziehung zwischen den Krankheiten der Nase und des Auges*, *Archiv. f. Laryn. u. Rhin.*, 1904, XV., p. 257), where, with negative nasal finding, the frontal sinus was opened, differ markedly in their clinical picture and course from the above seven cases, as they present one or more of the classical objective symptoms of sinusitis. Thirty-three per cent. of them were diagnosed after death (meningitis), and the others, with but one or two exceptions, were operated (external, intranasal or alveolar opening of the cavity or incision of orbital tumor). In each of my cases, not only was the history negative as to trauma and constitutional trouble, specific disease, tuberculosis, gout, etc. ("idiopathic"), but the classical objective symptoms of sinusitis, great edema, fistula, para, or intraorbital tumor, etc., were absent. Not one of them had a nasal secretion. The therapy consisted of syringing the sinus, thereby relieving the passive orbital hyperemia, which arrested the pathological process in each case, and in but one instance was the knife used, removal of part of a diseased middle turbinate to prevent recurrence, as the patient lived in the country. Not only are most of these cases unique, there being no similar cases in the literature, but the report itself, I think, is the first one made where the cause was definitely determined in as great a proportion of consecutive cases.

Accessory sinus disease, although it is not mentioned by the textbooks, I consider to be the cause of many cases of internal eye inflammation, and the failure to recognize it, the reason so many eyes are lost.

---

### **Report of a Severe Case of Membranous Croup (Laryngeal Diphtheria) Complicated by Intubation, and Treated By Large Doses of Antitoxin.**

By P. E. BECHET, M. D., Visiting Physician, Charity Hospital. New Orleans, La.

Though this case does not present anything new, I wish to report it, in order to impress the necessity of treating these malignant cases with large doses of antitoxin.

J. W., aet. 6½ years, white male child. Previously healthy. Apparently well nourished. Was first seen by me on the night of



the 28th of October, the fourth day of his illness. The parents, ascribing his condition to simple croup, had delayed sending for a physician. I found the little boy's condition somewhat alarming. Inspiration and expiration were labored. Inspiration was accompanied by a peculiar crowing sound, showing conclusively the stenotic condition of the larynx; they were augmented in number, numbering 35 to the minute. Pulse, 140. Temperature only 99°. On examining the throat by feeble candle light I could make out a thick, tenacious, yellowish, gray mass of membrane over both tonsils and posterior pharyngeal wall, and apparently extending as far down as I could see. A culture of the membrane was immediately made and a spray ordered, composed of peroxide of hydrogen, Dobell's solution, etc., to be used alternately with swabbing the throat out with peroxide. He was also given strychnia and a little bromide of potassium. The hour being very late, I ordered the serum for use early in the morning. On my return the morning of the 29th I found him very much worse, the dyspnea was profound, all of the auxiliary muscles of respiration being brought into play. Pulse was 148. Temperature by axille, 100°; the face wore an anxious expression, and the child seemed prostrated. I immediately injected 6,000 units of antitoxin into the buttocks, and ordered the other treatment continued. On my return about 1 p. m. I found the child in a dying condition; there was cyanosis; the pulse could hardly be felt; the drawing in of the diaphragm was intense; the cleidomastoids were very prominent, the child presenting that terrible appearance of the last stage of dyspnea. Having previously made arrangements with Dr. Dupuy in case intubation would become necessary, I immediately telephoned, and he responded most promptly. While awaiting him the child was given strychnia, gr. 1-60, atropia, gr. 1-50, digitalin, gr. 1-100, by needle. As soon as Dr. Dupuy arrived the child was intubated with little difficulty and just in the nick of time, for he was practically dead. The improvement was nothing short of marvelous, the child breathing easily, color and pulse returning slowly. Stimulation was kept up, and 6,000 units were given at 5 p. m., making 12,000 units in ten hours. On the morning of October 30 the patient's condition was very gratifying, and though the temperature had risen to 103°, he had been coughing up considerable membrane, the respirations were normal. However, as the pharynx showed more membrane, 3,000 units were given, and the next morning, October 31, 3,000

more were administered, making 18,000 units in 48 hours. That evening about 4 p. m. he coughed up the tube with a large quantity of membrane, and both Dr. Dupuy and I did not find it necessary to reintubate, as the child was breathing easily. No complication set in, and at present, with the exception of a slight dysphonia, he has completely recovered. The culture was reported positive. The medical treatment outside of stimulation consisted only in calomel fumigations, gr. xv every 4 hours, under a tent.

REMARKS.—The results in this case have proved to me that diphtheritic anti-toxin must not be measured by units, but by results, a view which is rapidly gaining ground, as proved by the work of McCallum, of Boston; A. Zamboni and others. Also the great superiority of intubation over the old method of tracheotomy seems to have been demonstrated.

---

## Louisiana State Medical Society Proceedings.

---

[EDITED BY PUBLICATION COMMITTEE.]

P. L. Thibaut, M. D. Chairman.

---

### **The Principles Underlying the Successful Treatment of Cystocele.**

By C. JEFF MILLER, M. D., New Orleans, La.

It cannot be claimed that we have, as yet, any one operation which insures a permanent correction of the injuries sustained by the anterior vaginal wall during labor. This is due to several causes. In the first place there are conflicting opinions as to the nature of the injury; and secondly, it is usually complicated with laceration of the posterior vaginal wall and descensus and retro-displacement of the uterus, each of which calls for various operations, or combined operations, for their relief. As a consequence the relief of a sagging anterior wall, bringing with it a diverticulum of the bladder, may call for a simple, or a very complicated procedure. The chief cause of failure has been that the proposed operations were not based upon sound anatomic principles, such as characterized the technic for the repair of the posterior vaginal wall. Early operators attempted to relieve the condition by

building up a high perineum, believing it only necessary to obtain support from the pelvic floor, while others endeavored to accomplish the same end by simply denuding the mucous membrane and lapping the pared surfaces upon each other.

There is no doubt but that the descensus and retrodisplacement of the uterus is the worst complication to be met with in these cases, and it is usually the cause of failures of the various operations.

It required years of experience to show that the earlier methods were failures, and it was only after the surgery of fascia was understood that any technic of practical worth was offered for this work. It is now known that it does not weaken, but strengthens the distended, thinned fascia to resect weak areas and bring fresh, well-nourished portions together, and it is upon this knowledge that our present work is founded.

It is generally conceded that cystocele is a hernia and the proper treatment is resection of the thinned vaginal plate, together with rearrangement of the bladder and uterus to avoid a return of the condition of prolapsus.

A brief review of the anatomy of cystocele will allow a better illustration of its treatment, and since Dr. Edward Reynolds has described so clearly and acceptably, from a surgical standpoint, the structures involved his article is quoted at length.

He lays particular stress upon the fixed points of the anterior vaginal wall, and insists that any successful operation must recognize its strong attachments; first, at the lower extremity to the inner surface of the pubes; second, at its upper extremity to the fascial structures on either side of the uterus, which are in direct connection with the broad ligament.

"It must be remembered that the posterior vaginal wall is mainly, and the anterior wall is wholly, supported by structures springing from the anterior half of the pelvic bones, hence it happens that while the walls themselves are exposed during labor to almost equal distending forces, the supports of the anterior wall are subjected to but little strain, and may even be relaxed by its forward distension during labor, while the supports of the posterior wall are subjected to great strain during its backward and downward distension, and in the concluding stage of labor the posterior wall and its attachments receive almost the whole strain of the advancing head. The result is that the distended posterior wall is exposed to laceration,

while the anterior wall, though always distended, is not lacerated at the conclusion of labor, then, the attachments of the anterior wall are intact, but the wall itself, between the attachments is greatly distended, and therefore sags forward and downward under the influence of gravity. The natural result is that when the support of the posterior wall has been lost the vaginal plate often fails to recontract during involution, loses resiliency, and no longer supports the bladder, though its edges are still inserted into the intact structures. This is, then, the anatomy of cystocele, and the condition is, in effect, a hernia of the bladder through a foramen formed by the attachments of the anterior vaginal wall, carrying before it, as its distended and overstretched covering, the vaginal plate of the anterior vaginal wall."

If we may add to this lucid description the injuries sustained by the muscle of the urogenital trigonum in the anterior vaginal sulci, which accounts for the sagging of the lower end of the vaginal wall, and especially of the urethra, the picture is complete. Since Hirst's first description of the injuries of the muscle, the writer has had occasion to examine many women before and after labor, and has been convinced of the efficacy of the operation then proposed, for the immediate repair to prevent cystocele, and for the later procedure to be applied in advanced cases, especially when associated with urethrocele.

#### TREATMENT.

In order to apply the general principles of operative treatment to these cases, some classification is necessary. The first classification should be according to cause. In aged women who have never borne children the uterus is seldom displaced, or prolapsed, and the sagging bladder is simply the result of the loss of tone of the vaginal wall. If uterine displacement is present it is most frequently due to an elongated, or hypertrophied cervix, and amputation of the cervix, together with the usual ovoid excision will fulfill all indications.

The type with which we are more especially interested occurs in the multipara and is associated with prolapse and retrodisplacement of the uterus.

The cardinal principle in this class of cases is to employ some technic which will force the cervix upward into the hollow of the sacrum and hold the uterus in its normal position.



This has been accomplished by operations upon the tissues behind the cervix, by obliterating the cul de sac, shortening the uterosacral ligaments, or fixing the cervix by some plastic operation on the lateral vaginal walls.

This type of operation is well illustrated in the Hegar-Sänger technic for retrofixation of the cervix; Boveés' operation on the sacrouterine ligaments; Emmet's or Dudley's replacing of the cervix.

Any operation which shortens the anterior vaginal wall by dragging the cervix towards the pubes is not founded on good surgical principles, and will usually end in failure by throwing the fundus deeper into the cul de sac of Douglas. The ordinary Stoltz operation belongs to this class. If it is ever applicable, it is only in aged women who have no prolapse of the uterus, but just sufficient sagging of the tissues to give rise to bladder disturbance. It may then be performed under local anesthesia with very fair results.

The method of choice when prolapse of the uterus is present is undoubtedly free separation of the bladder from the vagina and anterior face of the uterus, raising it to a higher plane and anchoring it in such a position as to prevent recurrence of the retrodisplacement. The relaxed portion of the vaginal plate is then excised and closed by interrupted sutures introduced laterally.

The objection which could be urged that such an operation interferes too frequently with future pregnancies is met with more than one good argument. The majority of women demanding this operation have about reached, or have passed the menopause, and if the condition is pronounced, even vagino-fixation by the Mackenrodt or Vineberg method, can do no harm. In fact, the uterus can be used in such cases to good advantage, by affording support to the bladder.

In younger women, simple separation and raising the bladder does no harm and if the condition is pronounced, vaginal suspension can be quickly done through the anterior vaginal incision.

The writer has applied the technic suggested by J. Riddle Goffe in two instances with perfect success.

This consists in separating the bladder, raising it to a higher level, and smoothing its base by sliding it outward on the uterus and anterior surface of the broad ligaments and anchoring it there. This high attachment acts reciprocally in both lifting the bladder to a higher level and maintaining the uterus in a normal position.

After the bladder is fastened to the broad ligaments, the over-stretched tissues of the vaginal plate are cut away and the wound closed.

Goffe's method does not fix the uterus as in the Mackenrodt operation, and can therefore be employed more generally than any of the fixation operations. In a personal letter recently received from Dr. Goffe, he states that since the publication of his preliminary note on this technic, in June, 1903, he has thoroughly tested the operation, and the results are perfect.

If there is marked sagging of the wall towards the lower end, or more particularly of the urethra, Hirst's triangular denudation for reaching the muscle of the urogenital trigonum, can, and should be combined with any incision made for correcting the cystocele.

#### REFERENCES.

- E. W. Reynolds, Transactions of the A. M. A., 1903.  
E. W. Reynolds, *American Medicine*, Aug. 2, 1902.  
E. R. Dudley, *Journal A. M. A.*, April 4, 1903.  
B. Cooke Hirst, *American Jour. of Obs.*, June, 1903.  
J. Riddle Goffe, *American Gynecology*, June, 1903.  
Askar Schaeffer, Atlas of Operative Gynecology.

---

### Fresh Air and Physical Discipline in the Treatment of Pulmonary Tuberculosis.

By C. H. TEBALD, JR., B. S., M. D., New Orleans, La.

In these progressive days of medical research when so much study is given to the etiology of disease, and in consequence so many new theories and treatments are advanced, I fear, in regard especially to pulmonary tuberculosis, there has been a neglect in those cruder, yet more essential, measures of fresh air and physical discipline, particularly in the initial stages of the disease. The vast benefits of healthy exercise and regularity of habits, with a life spent as much as possible in the open air, were early impressed upon me while I was an undergraduate in medicine.

As a first year student I was following the demonstrator of physical diagnosis at the Charity Hospital of this city, when a man was placed before the class for examination. He was a negro, about thirty-two years of age, and represented a typical case of

tuberculosis, with cavities in both lungs. He gave the usual classical symptoms of the disease, and the usual prognosis of his case was made. He heard the demonstrator announce to the class that death would take him before the year ended. He became frightened and did not tarry long in the hospital.

A month after his disappearance from the ward he became embroiled in a difficulty with another negro. He killed his adversary. After a speedy trial he was convicted of manslaughter and sentenced to the Louisiana penitentiary for ten years.

An interim of four years ensued. I had the surgical service, as interne, under Prof. Matas in the Charity Hospital. Late one evening the ambulance brought in a wounded negro, and he was placed in my ward. He was suffering from a gun-shot wound of the abdomen with peritonitis well advanced, and being in *articulo mortis*, no attempt was made to do more than relieve his pain. He being perfectly conscious, recognized me with this greeting: "Don't you know me, doctor? I am the man with the consumption. The old doctor said I was not going to live the year out. That's four years ago. I was in ward 34." Naturally I became very much interested, and made him give me a history of his career since I saw him last.

In spite of the pinched expression of approaching dissolution, he looked anything but like a consumptive. He was muscular; his chest was full, and his body well nourished. He said he was sent to work in North Louisiana on a plantation, and was up early every morning at the same hour; was fed on good substantial food, and very seldom ever got a drink of whisky. He was too weak at first for any hard physical labor, so he was made to drive a mule team for a while. He was subsequently placed at the plough, and made to do all kinds of hard work until he became thoroughly habituated to it. At first he was very short winded, and "most killed" as he expressed it, but after two years was able to keep up with the other convicts.

In an attempt to escape he was shot in the abdomen twice by one of the guards, and was brought to the hospital twelve hours after the shooting.

The negro died next day. As I had charge of the pathological department, I held the autopsy for the coroner. The lungs proved the accuracy of the diagnosis made four years before. Three large cicatrices, one filled with a well-isolated, hard, cheesy mass which

contained no tubercle bacilli, stood as landmarks to what were once three fair sized cavities. There were several smaller cheesy nodules scattered over the lung area, but microscopical examination disclosed no sign of the bacilli.

This was an undoubted case of recovery from pulmonary tuberculosis without medicine, without the air of the celebrated health resorts, but under surroundings which one would deem most unfavorable.

Of course, I am not advocating the Louisiana penitentiary as a curative haven for consumption, but what impressed itself upon me so forcibly is the wonderful resources of nature if aided by proper discipline, food, and exercise in the open air, where a free and vigorous ventilation of the pulmonary air cells can supply the impoverished blood current with life-giving oxygen to burn up broken down material, and spur the lethargic emunctories to their proper functions of excretion. Then comes the ability to digest, assimilate and rebuild. Here was a man who was under compulsion to perform certain routine duties in the open air; denied the excesses of dissipation; placed on a routine substantial diet made to arise early, and retired at nightfall in a condition to enjoy a refreshing sleep, "tired nature's sweet restorer."

When, in practice, a consumptive appears for treatment, I always bear uppermost in mind the necessity for pulmonary ventilation in the way of lung packing. That is expanding the lungs to their greatest capacity frequently and at regular intervals during the day, always in the open air. I find that by inhaling deeply through the mouth and exhaling through the nose during this process that the lung pressure is not released so suddenly and the danger of capillary hemorrhage avoided. If anyone tries this procedure regularly, it will be surprising to find how much the lung capacity is increased.

Of course, we know that the open air treatment is nothing new in the management of consumption, and that colonies of tenters are scattered over different favorable climatic parts of this country, Mexico, Colorado, California, and, especially of late, Arizona. The great difficulty is that the treatment to a great extent ends in the mere residence in tent life. There is no discipline, no routine. The patient basks in the sun reading a novel, or takes irregular walks or rides according to his own sweet will. Clock-time, routine,



day after day, week after week, is disregarded, except it be to administer medicines of the cod-liver-oil, creosote kind.

There is no regular diet, but the patient is advised to eat freely. This rather vague advice is frequently lost upon a consumptive.

I find that even in New Orleans, with its marshy surroundings and variable temperature, I have succeeded beyond my expectations in the treatment of a few cases who have put themselves unreservedly under my discipline. We all know how hard a consumptive is to manage. He may feel buoyant today and depressed tomorrow, and, if left to his discretion, will regulate his life according to his feelings. We have heard of the drowsy sloth that comes over the traveller lost in the snow, if he yields to his impulse, he will lie down upon his soft white couch which quickly saps his life away while he sleeps, so with the lethargy of a consumptive. Disease is progressing while the excretories dull themselves with rest.

In order to secure proper results, each day must be utilized in the same methodical manner, very much as the time of a child attending school. There is no royal road either to health or education, but the monotonous laws of nature must be respected and obeyed.

Slowly and imperceptibly tissues and cells are destroyed and repaired, and, upon the equilibrium of these metamorphoses does health, even life depend. The forces which accomplish these changes are vitally important to the consumptive especially. His physical existence must be toned to the utmost by natural means first, and nature's allies in the way of medicines, etc., may come in as timely reinforcements.

I find it of great importance to give the patient a tabulated system for daily obedience in regard to hours for arising and retiring, baths, walks, lung-packings and diet. By toning up the appetite so that eggs, preferably raw, milk, oat-meal, broths, etc., may be readily assimilated, the nauseous cod-liver-oil may be dispensed with. The bowels are brought under obedience so that they act at the same hour each day. Body massage is a useful accessory to the patient, and he is taught to be his own masseur, and thus gain physical exercise at the same time.

Of course, in a paper of this kind, a mere outline can only be given which one's judgment may easily fill in.

The patient reports regularly as to any infractions of the orders

given him, and thus feels that he is under surveillance. This encourages him in his long fight for life.

Some of the results accomplished by this strict code of discipline have been more than gratifying to me, and, though it is rather hard on the physician to listen to reports of all the little details of this treatment, yet the results of this work will be as apparent to him as to the patient himself.

I, by no means, underestimate the value of therapeutics in the way of drug-tonics and certain pulmonary antiseptics, but, as they do not come under the title of this paper, I shall omit them from consideration.

In closing, I would say that no athlete would think of undertaking some trying ordeal without strict disciplinary training, and no consumptive may hope for a recovery without strict discipline to natural laws governing exercise, fresh air, and proper diet, and abandonment of all injurious habits.

---

### **An Unusual Case of Retained Fetus, with Specimen.**

By P. A. BOYKIN, Jeanerette, La.

LUCILLE S., resident of this place, became pregnant about November, 1899 and presented the following symptoms and complications. From the time she became pregnant in November up to the sixth month, her periods were regular, when, at the seventh month they were suspended. During the first nine months she presented various symptoms of pregnancy, and, as she puts it, she knew she was pregnant despite her being advised to the contrary, i. e., that she had a tumor. During the first nine months she suffered little inconvenience save occasional backache and pains in the lower extremities which were referred to her womb. At the termination of maternal period, she expected every day, until having gone over to eleven months, and becoming alarmed, she consulted a physician who advised her to wait, that it was possible that she had made a mistake in her counting. So she waited and waited until pains and aches of the entire system began to set in about the fifteenth month and gradually increased until she was compelled to suspend work of every kind and was often in bed up to about two years after conception, when the bed was solely her home until after relief by operation. I will state here that this is

about as correct a history as it is possible to obtain. I was called in February, 1903, when a thorough examination was made not only of the uterus but of the liver, kidneys, heart and lungs. The diagnosis made from this examination was dead fetus and a tubercular condition of the upper lobe of the right lung. The patient was very much emaciated and complained of profuse night sweats and daily fevers, the temperature being  $101\frac{1}{2}^{\circ}$  at the time of her examination. The diagnosis was made clear to her and the necessity of an immediate operation which was refused. I lost sight of the patient as she went under the treatment of another physician who told her that she had a tumor and advised her to go to the Charity Hospital, which she declined.

I was again called in June 1903. She was then urged to have the operation performed at once or take chances and live but a few months at best; so her consent was gained and no time lost to build the system, for it was rather desperate and equally so either way, as by this time depravity of the system was extremely great and the hectic fever still continued, ranging higher than ever. On the 26th day of June, 1901, I called Dr. Simmons of Glencoe, St. Mary Parish, to administer the anesthetic (A C E mixture, which was borne fairly well).

I made an incision from the umbilicus down to within an inch of the symphysis pubis along the line of the linea alba, when the sac containing the fetus was reached. It was found to be tightly and firmly adherent to the abdominal wall. A thorough supply of rich blood vessels had been formed which made it very difficult and dangerous to dissect away, so it was, at once, decided to have it intact and incise and turn out the contents as rapidly as possible. This was done and the child was found in a complete state of decomposition floating in a sea of the most fetid pus one could well imagine, the quantity of pus being between one and half and two gallons. The skeleton was perfect; even hair and nails had reached complete development. The cavity which was very hard and indurated was then cleansed by bichloride then lastly chloride of soda solutions and the cavity was packed with iodoform gauze beneath which were placed two large drainage tubes and the incision only closed in the center for three inches, free drainage being thoroughly established.

Now, as regards the condition of the womb before the cavity was closed, the position of body and cervix were noted. The left

cornu and body and cervix did not play any part in this case at all as they were but little enlarged but the right cornu had been the recipient of this unfortunate fetus and not until pressure became so great upon the left cornu did menstruation cease. The left ovary was intact but the right was completely destroyed in the local chronic peritonitis that followed the retention and decomposition of the fetus.

In conclusion I will say the indurated tissue that surrounded the fetus has been nearly absorbed with a partial left lateroversion and a normal sized uterus with a regular menstrual epoch, but which is scanty, doubtless due to the tubercular condition from which she was now suffering. Two months after the operation she was able to be up and took daily outside exercise and strong nourishment which agreed with her as strength came and seemed to be a checking of the tubercular depression for the vital resisting power seemed greater than the ravage of the disease and after about six months after the operation when she had a slight hemorrhage from the lungs and was confined to bed for about a month she began to improve and gain flesh rapidly and today is enjoying fair health, having gained about thirty pounds, her strength and endurance being fairly good. My treatment of the lungs consisted of carbonate creasote in large doses combined with tonics.

This has been a very interesting case to me and as I well knew it was my first case of the kind I felt sure that some, if not all of the members present, would like to know of it and the results that followed.

---

### **The Anti-toxin Treatment of Hay-fever.—Personal Observations in Prof. Dunbar's Laboratory.**

By DR. C. JOACHIM, New Orleans, La.

I will relate to you the work I have done during a part of the past summer with Prof. Dunbar whose anti-toxin for the relief of hay-fever is under discussion, and I will show you some material collected during that time.

By hay-fever we understand a complex of symptoms affecting the nose, eyes and lungs; setting in and disappearing periodically every year at about the same time in persons susceptible to the disease, and characterized by itching of the eyes, photophobia, excessive lachrymation, tickling in the nose and roof of the mouth



with paroxysms of sneezing, obstruction to breathing; excessive serous discharge from the nose, and in many accompanied by asthma. Objectively we have injection redness and swelling of the conjunctiva, distention of the covering membrane of the turbinals of greyish white to a bluish-grey appearance. Systemic symptoms of depression, without fever however, accompany these local manifestations.

The attacks during the season are more or less intermittent, most freedom being enjoyed in the middle of the day. A group of patients begin to be attacked in April, another in June, and the greater part, however, in August, and these get relief when cool weather sets in. In all true hay-fever, the attacks begin and cease in almost all susceptible persons at about the same time.

A similar complex of symptoms must be distinguished from this condition of true hay-fever, and by means now at hand, as a rule, can be distinguished. This class of patients suffer more or less all the year, show a great susceptibility to taking cold at all times, and this cold manifests itself in attacks similar to hay-fever. The test distinguishing it from hay-fever will be referred to later on. The investigations on hay-fever patients which I will relate to you do not oppose the accepted views on hay-fever but concern themselves with the development and proof of the theory of pollen causation, and with the treatment by means of anti-toxin derived from these sources. The contributing causes of hay-fever, of abnormal conditions of the nose and abnormal nervous conditions find therein not only support, but partial explanation.

The publication of a pamphlet by Dr. Dunbar, entitled "The Cause and Specific Cure of Hay-Fever," which I received last spring, alleged as facts so many important matters which were held as more or less theoretical, or not entirely proven, that I concluded it worth while to look into these remarkable facts while in Europe. For this reason, I took passage direct to Hamburg, and to a telephone inquiry as to when I could see Prof. Dunbar, I received a cordial invitation to call even before my baggage had arrived at the Hotel. In the meantime, a further communication of Prof. Dunbar's had appeared in the Berlin *Kl. Wochenschrift*. Also an article by Dr. Thost, a very eminent throat specialist in Hamburg, who investigated the use of hay-fever anti-toxin from the specialists' point of view.

Prof. Dunbar received me most cordially, and I stated to him

that I had come to convince myself of the remarkable scientific and clinical results he had published, and should like to go over the entire work done by him, or for him, with the ultimate end in view to test his conclusions at home, and to see how far they applied to hay-fever as known in our section of the country where the disease and the flora differed in many respects from those of the country where he had made his observations. In Europe, the hay-fever period lasts from the end of May to the end of July or the beginning of August. In answer to my request, he called his personal assistant, Dr. Prausnitz, and instructed him to meet all requests I might make of him.

Prof. Dunbar is by birth an American, St. Paul being his native place. He, as well as his assistant, suffers from hay-fever, and the experiments were made upon themselves and a number of other hay-fever patients at his disposal.

It would carry us too far to relate in detail the observations which caused Prof. Dunbar to change his views from the microbic cause of the disease to that of pollen causation. They rest largely upon the methods followed by Blackley and others. Once convinced of this fact, his staff was set to work to examine the pollen contents of the air, first as to the amount of pollen; second, as to their possible identification. This examination was made in two places daily. Upon the roof of the Hygienic Institute, and at the level of 6 feet from the ground in the Botanical Garden, by exposing microscopical slides in the vertical and horizontal position to the four points of the compass. These slides were moistened with a Blackley solution. The pollen deposit thereon was counted daily. I am able to show you the result of these observations. Further observations were made as to the influence of the direction of the prevailing wind to the number of pollen observed; of the deposit of moisture, of temperature, barometric pressure, etc. Pure pollen of the grasses and other plants had been collected by himself, and through the agency of the Botanical Garden, which is across the way from the Hygienic Institute, and 125 different pollens were tested upon the conjunctiva and nasal mucous membrane of persons susceptible to hay-fever and of other subjects not susceptible to hay-fever, these tests being conducted at the time of year when no hay-fever prevailed.

Variation in the results obtained made precautions in the collection of pollen necessary, and in order to arrive at definite

results, no pollens were experimented with if microscopic examination showed admixture of other pollens. The method used in the Institute for collecting pollen pure has evolved through failure to obtain unmixed pollen; and now pollen bearing plants are cut before the pollen bags are open. The plants are put in a slanting position in a long narrow basin containing water, and exposed to the sun in a room closed to all chances of air disturbances. within a short time that pollen bag opens, and by gently shaking the plant, the pollen can be collected pure in sterile dishes set underneath.

In order to keep pollen from decomposition due to the enzymes and other substances they contain, it is necessary to keep them exposed to the sun for two or three days, occasionally stirring them. In their dry state, they keep their full activity for an indefinite time.

When examined under the microscope, they present in their fresh state a variety of shapes and sizes. Some are of beautiful design and many have a surface covered with great numbers of pointed projections. The pollen of solidago, or goldenrod, of which I have five varieties, are of this order. Pollens are covered with an external membrane called the exine, and have another covering to their contents called the intine. They contain from one to four openings called stergimen, which have in some varieties a lid like a cover.

The pollen of the grasses and of the cereals contain starch rods, as shown by iodine tests, and all of these are active on hay-fever patients, and inert when applied to the mucous membrane of persons not susceptible to hay-fever. By activity or reaction on hay-fever patients, I mean the production of the typical symptoms of hay-fever usually observed, including hay-fever asthma in some cases. While differing in degree of reaction, the pollen and the toxin derived therefrom produce, when instilled into the eye of the hay-fever patients, where the objective symptoms are susceptible of easy control, a specific and analogous reaction, *which is never observed in normal persons even if used in excessive doses.* The objective symptoms were a rapidly increasing redness and injection starting from the canthus and leading to swelling and chemosis of the conjunctiva. The subjective symptoms were always itching, a sense of heat and photophobia and lachrymation. Iden-



tical effects were observed when the toxin derived from the pollen was applied in any of the mucous membranes.

It was assumed at first that only starch carrying pollens were active; but of 125 different plants of which the pollens were examined, a number of non-starch carrying pollens proved also to be poisonous to persons susceptible to hay-fever. It is known to you that pollens are distributed by two means. First, anemophilous or the wind carried pollen, and second, entomophilous or the insect carried pollen. Of the latter class, only the pollen of the lily of the valley has so far been found active; but not being found in the atmosphere they have no great interest for our purpose. We are mainly concerned with the wind carried pollen. I hand you here the list of pollens I have examined as to their size, shape, exterior appearance, starch contents, and stergimen. Their positive or negative action is not of my own observation.

As we now know the poisonous or non-poisonous action of the plant pollen growing in abundance, on persons susceptible to hay-fever, the next problem was to determine and separate the poisonous substance contained therein. Considering the dilution of pollen in the air, it must necessarily be plants flowering in profusion at certain times of the year which furnish sufficient pollen to produce the severe effects we observe in hay-fever patients. Through many and varied experimental tests, it was found that the poisonous substance contained in pollen—poisonous to persons susceptible to hay-fever, and innocuous to all others—could be extracted from them by 10% salt solution, to the extent of rendering the remainder inert to persons susceptible to hay-fever. This process could be facilitated by first grinding the pollens in an agate mortar to break their covering, and could be hastened by keeping the mixture in a culture room for from eight to twelve hours. The mixture should then be centrifugated. The superimposed liquid contains the poison in solution. The sediment can be deprived of all the remaining toxin by letting it go through the same process once more. The toxin contained in the salt solution can be thrown down by the addition of alcohol, and when so deposited should again be centrifugated and the sediment washed with ether. By keeping it in the culture room, a dry deposit can be secured and this residue represents the active poisonous substance to hay-fever patients. A dilution of this to 1:2000 or 1:4000 produces, when applied to the eye or nose or to any of the mucous mem-



branes of persons susceptible to hay-fever, all the symptoms of this condition, irrespective of the time when hay-fever prevails, and is inert when applied to analogous mucous membranes of persons not susceptible to hay-fever.

Having obtained this toxin, which chemically is a protein compound, it suggested itself to Prof. Dunbar to attempt to produce an anti-toxin in the manner usually adopted for the production of anti-toxin from biological toxins. In accomplishing this end, Prof. Dunbar has evolved an entirely new departure and scientific advance in the production of an anti-toxin from plant sources of high orders. While most animals showed no reaction whatever to the injection of the toxin, and goats produced an anti-toxin of only moderate degree of activity, some horses, and especially such as we know as high bred horses, reacted to injection of  $\frac{1}{4}$  gram of active pollen in a most striking manner, and were for the time being quite ill with well defined local and general manifestations. As they gradually became accustomed to increasing injections, their blood developed anti-toxin qualities which gradually increased to the extent that one drop of anti-toxin neutralized in vitro 25 drops of active toxin solution, which is to say, that if one drop of the anti-toxin blood serum was mixed with 25 drops of toxin solution of 1:2000, one drop of which is usually productive of severe reaction in hay-fever patients, this mixture becomes inactive, even if applied to susceptible persons. It is this strength of anti-toxin which was formerly supplied in a liquid state, but is now furnished in dry powder form in which state it is less liable to decomposition and is free from irritation due to the carbolic acid contained in the liquid preparation.

It is of especial importance, and I wish to emphasize the fact, that the main value of the anti-toxin lies in its prophylactic powers. The anti-toxin acts with the greatest force if used in vitro. If used on membranes already under the influence of the poison, larger doses are necessary. In this, we have a strong analogy to the use of diphtheria and other anti-toxins, when used in a prophylactic or else in a curative way. In the latter case, much stronger doses have to be always employed.

We must not expect that one application, or even repeated applications will bring about a cure. Inasmuch as active pollens contained in the air during hay-fever season are continually inhaled, it is necessary for those susceptible to the poison to continually

neutralize the poison and for this reason, I believe we cannot strictly speak of curative qualities of this hay-fever anti-toxin. Until an active immunizing agent has been obtained, the best that we can expect—and to the hay-fever patient this is of enormous value—is that by intelligent, persistent and proper use of this anti-toxin the distressing symptoms can be kept in abeyance. By the intelligent use of this agent, the patient can keep himself comfortable and able to attend to his affairs, and keep the parts less susceptible to poisoning than without it.

In a recent compilation of cases, Dr. Dunbar reports the following results in a total of 285 cases, of which 63 are of autumnal variety and reported from this country; 222 cases of the variety prevailing in Europe. In the latter class of 222 cases, absolute relief was attained in 127 cases, including 14 cases of asthma, equaling 57%. Partial relief was attained in 71 cases, including 6 cases of asthma, equalling 32%. No result in 24 cases including 9 cases of asthma, equalling 11%. Of the 63 cases of autumnal catarrh reported from this country, the results were as follows:

Absolute relief was attained in 44 cases including 8 cases of asthma, equalling 70%. Partial relief in 12 cases including two cases of asthma, equalling 19%. No relief in seven cases including three cases of asthma equalling 11%.

It is apparent that the results in the autumnal variety were even better than in the June variety of hay-fever. In analysing the results various causes manifested themselves why failure appeared, above all it became manifest that the prophylactic value has not been sufficiently appreciated and the remedy used after the full development of the symptoms. Ineffective and even absurd uses were at times the cause of failure. Some of the partially successful cases used the liquid preparation, when they would very likely have gotten entire relief by efficiently using the powder. Some of the cases were effected with coryza nervosa and not proper subjects for anti-toxin. On the whole, the hope is justified that with early, intelligent and efficient use, the symptoms of hay-fever in proper cases can be kept in abeyance. Our personal results are on a parity with these reports, but not a part of them. Excellent results have been also reported on the part of my colleagues.

Whatever the relation of true hay-fever to this condition of coryza nervosa, it is evident that the clinical symptoms are closely

related. The relationship of the anti-toxin obtained from rye to that obtained from goldenrod is also of interest. As different groups of patients seem to be affected by pollen of plants in bloom at different times of the year, it would be theoretically most desirable to have for each group its particular anti-toxin. Practical results prove, beyond a doubt, however, that anti-toxin of rye neutralizes the toxin of goldenrod pollen; but it must be used in greater quantity. This points to a relationship of the anti-toxins among themselves. Chemical tests do not differentiate them, nor does the precipitate test. This relationship finds its analogy in the varying intensity of agglutination of bacillus typhosus and bacilli related to it. It is fortunate that this condition exists as it allows the use of one anti-toxin (if necessary) for relief of hay-fever until further developments furnish an even more specific anti-toxin.

Experiments have been made with the view of producing active immunity by the injection of the toxin into persons susceptible to hay-fever. Prof. Dunbar, being a hay-fever sufferer, tried this experiment on himself and warns against the use of the toxin in this manner, and holds it as not permissible, so severe were the local and systemic effects produced thereby. The effects of a similar injection on a person known to me, who is not a subject to hay-fever, were nil. The anti-toxin has also been used by subcutaneous injection, and in this field much can yet be looked for. The immunity produced by the subcutaneous injection of the anti-toxin is short lived—about one day—as present experience goes, and it is not always free from unpleasant effects, especially of a local nature. These will probably be eliminated by the work of the physiological chemist who has separated the toxin obtained in the above described manner into a number of different proteins, some of which are active, others not. The dilution in which some of these bodies are still active is 1:50000, and represent the toxin as has been calculated of about 8 pollen grains. As I have indicated above, all of the mucous membranes of the body react in an identical way to the action of the pollen in persons affected with hay-fever.

The specific action of the toxin when applied to mucous membranes of persons susceptible to hay-fever, and entire absence of reaction on all others, permit the diagnosis of a diathesis with a certainty to which we have no parallel in medicine. It enables us



to differentiate the true hay-fever sufferers from those suffering from a similar trouble of which we see more or less during the entire year. These patients do not respond to the toxins. Their condition is due to other causes and probably present a class of patients where local treatment has been, and is, of considerable benefit. I am sure that my confrères can, as well as myself, point out cures by these means in patients which we have taken to be hay-fever sufferers.

The attack of true hay-fever sufferers begins and ends nearly about the same time, while with the other class of patients the symptoms exist more or less all the year. Not all hay-fever patients are susceptible to all active varieties of pollen or their toxins. Prof. Dunbar is extremely susceptible to the toxins of the graminæ orders as well as to toxin of goldenrod, while his assistant is not affected by goldenrod, but severely by rye toxin, and I have personally observed an instance where goldenrod toxin produced severe reaction and rye toxin none whatever. These observations would lead to the conclusion that hay-fever observed in June is due to a different pollen than that observed later in the year, and the different sets of patients are affected at different times of the flowering season. The verification of these conclusions and the merging of these different conditions from one time into another are matters for further observation and study.

It is of the utmost importance to arrive at a proper understanding why this poison acts on some persons and not on others. The difficulties met with here are enormous and different theories have been tested and interesting experiments have been made to find out where to locate the particular minus, which permits pollen to act as a poison to some persons and not to others. If that particular deficiency lies in the blood it would look reasonable that pollen should become inactive on mucous membranes of hay-fever sufferers, if mixed with normal human blood, but if so mixed and applied their effect, if anything, seems increased.

On the other hand, if it be assured that the blood of the hay-fever sufferer contains some substances which by their combination with pollen make them poisonous to the hay-fever sufferer, it would seem reasonable that if the pollen be mixed with blood of the hay-fever sufferer this pollen should then become active on the mucous membrane of a normal person. Such is not the case. These and many other hypotheses have been and are being



investigated. At present, we can assume that the cause lies in a permanent injury to the nerve centers acquired by the effects of disease, especially la grippe, according to the collective investigation of Thost, and to conditions inherent to higher civilization. It is a fact that savages, and to a great extent the peasantry are exempt from this trouble. Their number increases as we ascend the scale of confining physical or mental occupation. The learned professions furnish a very extraordinary percentage of those affected.

---

### **Some Manifestations of Influenza in the Ear and Upper Air Passages.**

By GORDON KING, M. D., New Orleans, La.

For the average layman the term influenza, or more commonly "the grip," has no limit in its application, and serves as the general appellation for every little anonymous physical indisposition that disturbs the even tenor of his daily life, as well as being the starting point of any serious affliction that comes upon him. It is not always a simple task for the medical man, either, if he undertakes it, to make infallible differentiation between a true influenzal attack and certain other febrile and catarrhal conditions that bear it close resemblance in its milder forms.

Being an ill-defined affection, varying greatly in its clinical symptoms, intensity and duration, it is difficult to recognize it by any special symptom or group of symptoms, and often we are unaware of its presence until it manifests itself in characteristic manner in some organ or part which we know to be especially prone to its attack.

Of the three types generally known, the respiratory, the gastrointestinal and the nervous, the first is by far the most frequently met with in the pandemics of recent years in our locality, although, in every case, however mild, the general nervous depression is present, and in degree not proportionate to the intensity of the local disturbances or febrile movement.

It is the respiratory or catarrhal form, therefore, that concerns us most, and particularly so in the practice of the laryngologist and aurist.

The marked imprint made upon the mucous membrane of the upper respiratory tract in the course of grippal inflammation is

so distinctive as to place it practically in a category entirely apart from other acute catarrhal inflammations affecting these parts, not so much from any peculiarity in appearance of the affected membrane as from the intensity, and the tenacity of the inflammation and the virulent tendency it shows to invade contiguous parts and give rise to painful and serious complications. This is notably true of that common clinical type in which the attack comes on brusquely as a violent cold in the head or acute rhinopharyngitis, the storm center of the local manifestations being located about the nasal cavities and the naso pharynx and so frequently invading their adnexa—the accessory cavities and the tympanic cavities.

The involvement of these cavities in a violent suppurative inflammation, following in the wake of an acute catarrh of the nose and throat, is in itself strongly suggestive of grippal infection, and combined with these general symptoms of physical and mental depression and myalgic pains which attend and follow the onset of the affection, the clinical picture of this type of grippe is complete enough.

The influenza bacillus, while always present in the excretions of the affected mucous membranes, is not directly responsible for the violence and the invading tendency of the inflammation, but its toxicity is plainly evidenced by the weakening effect it has upon the vitality of all the organs of the body and especially upon the mucous membranes directly attacked. It is through this diminished power of resistance that the streptococcus, the staphylococcus, the pneumococcus, and other pyogenic organisms gain a foothold and engraft their destructive and toxic processes upon the mucous surface. The presence and activity of these organisms account as well for the variety of aspects given the disease and its complication. That these germs depend in great measure upon some such devitalizing influence for the exercise of their pernicious effects is evidenced by the fact that they are often present on the surfaces of mucous membranes of the nose and throat without manifesting any tendency to cause inflammation.

Polysinusitis occurs about as frequently as an involvement of one cavity alone, and this is especially characteristic of grippal infection.

A case beautifully illustrative of this complication was recently put under our care through the kindness of Dr. T. M. Duggan, a

brief history of which will give a clear illustration of accessory sinus complication from the grip.

S. B., a street car conductor in the best of health, was attacked with a violent cold in the head, coming on with chill, and accompanied by fever, pains in the back and limbs, a general feeling of soreness in the muscles and considerable prostration. The acute symptoms passed in a few days, excepting the copious nasal discharge and violent pain in the head, centered about the left frontal region, and the left side of the face. So constant and violent were these pains that the patient was unable to gain a moment's rest, and begged for relief to his sufferings.

At the time he came under our charge there was marked tenderness over the orbital arch and facial surface of the superior maxilla. The nasal discharge was more marked from the left nostril and of a yellow, creamy character, the origin of which was seen upon rhinoscopic examination to be from the region of the middle meatus. Transillumination of the frontal and maxillary region showed marked opacity on the left as compared to the right side. Exploratory catheterization of the frontal and maxillary sinuses on that side revealed a collection of thick pus in both. The relief afforded the patient by this procedure was only of short duration and I soon found it expedient to make an opening into the antrum through the alveola to obtain freer access and more perfect drainage. The frontal pains continued to be so distressing in spite of daily catheterization that it became necessary to open the frontal sinus widely through the supra orbital arch. Through these free openings the cavities were irrigated daily and the pains rapidly vanished.

A dermatitis of the face came on in a few days and caused some discomfort and anxiety on the part of the patient. It was attributable either to the iodoform dressing in the frontal wound or to the virulence of the pus discharge from the sinus. At the end of about three weeks when both cavities had about ceased to suppurate, the patient complained of another slight attack of cold and not only did both sinuses begin to discharge freely again but the maxillary antrum of the other side, which had hitherto been healthy, became infected and required to be irrigated daily through the nose for ten days before the suppuration ceased.

The cavities first affected also ceased to discharge, the openings were permitted to close, and the patient dismissed.

This case illustrates two periods at which the complication may occur and a more violent type of sinusitis than sometimes occurs. A mild or subacute form of inflammation may occur and be overlooked by the patient or the medical attendant until the other catarrhal symptoms subside and attention is called to the affection of the cavity, especially if unilateral, by the persistence of a purulent discharge from the nose, which may become fetid and be associated with dull chronic headaches. Such cases, if left untreated, later become chronic and require radical measures to cure them.

The aural complications of influenza are perhaps a still more frequent phenomenon than involvement of the nasal accessory cavities and deserve more serious consideration on account of the destructive effect on the organs of hearing and the fatal termination sometimes resulting.

The degree of involvement of the ear may vary from a slight catarrhal inflammation of the eustachian tube to a most virulent suppuration of the middle ear and mastoid cells with the dangers that attend such a condition.

Unfortunately the most common type appears to be middle ear suppuration and of a virulence and gravity which is only equalled by that due to scarlet fever. It differs, however, from the scarlatinal process in this particular, which I have remarked in the observation of a number of cases of suppurative otitis from both causes

While scarlatinal affection shows a marked predilection for destroying bone and soft parts by a carious or sloughing tendency which often leads to destruction of the drum membrane and ossicular chain, the grippal inflammation seldom exhibits this rapid destructive character, but causes instead a copious suppuration of the mucous surfaces, upon which it seems to extend its greatest virulence. In the acute stage the tympanic membrane may be the seat of hemorrhagic blebs or more often becomes thickened by infiltration and a small pouch-like perforation takes place in the upper posterior quadrant through which a thick, creamy pus escapes into the auditory canal. This form of perforation is so common as to be almost characteristic of grippal otitis and the difficulty with which the pus escapes through this small opening in the thickened membrane accounts, no doubt, for the excessive pain and the frequency of mastoiditis in the suppuration from grippe. The pain in ordinary acute otitis subsides rapidly after rupture or incision of the drum



membrane, but in the grippe ear may persist for several days and be associated with dull pain in the fronto-parietal region of the same side.

If thorough drainage and cleanliness of the middle ear is not effected in the treatment the danger of mastoid involvement or brain complication is very great. To accomplish this it may be required to make repeated incisions through the drum membrane or even remove a small segment to permit the pus to flow out unobstructed into the ear canal.

The first indications of mastoiditis are increasing pain and tenderness over the process, sagging of the upper posterior wall of the ear canal and slight elevation of temperature. When these symptoms appear and are not relieved by leeching, application of cold, and frequent cleansing of the middle ear, it is far safer to open the mastoid cavity than to await the full development of a suppurative mastoiditis or, worse still, an intracranial suppuration.

The hearing power is greatly diminished during the active stage of the otitis but may return to its former standard in the course of time, when the inflammatory thickening of the drum has been absorbed. In some cases a progressive deafness follows with ultimate great loss of hearing.

The more serious form is that producing complete deafness by attacking the labyrinth or the auditory nerve, but this complication is much more common to scarlitina than to grippe. Another common sequel of the catarrhal form of grippe, and one that is also due to measles and scarlatina, is the hypertrophy of the faucial tonsils and of the adenoid tissue in the pharyngeal vault. It is an every day clinical experience to meet such cases where the phenomena arising from the enlargement of these glands, such as mouth breathing, snoring, etc., could be traced to their origin in an attack of the grippe.

Finally, I would call your attention to that persistent, aggravating, hacking cough, so commonly a symptom of the later stage of influenza, and often the last tenacious vestige of the disease to desert the long-suffering patient.

This weakening of the normal resistance of the mucous membrane to pyogenic invasion is attributable either to an alteration in the character of the mucous secretions, which, especially in the nose, are credited with a certain degree of antiseptic power, or to the chronic congestion that almost invariably follows a grippal

attack left to run its course. The latter appears to be a rational theory since we must admit that stasis invites germ manifestation. Cohen claims that there is a vasomotor paresis resulting from grippe that affects both the blood vessels and the lymph channels causing the stasis and favoring suppurative conditions.

The alteration of the mucous secretions is, of course, but a natural result of the acute and chronic congestion incident to the grippal invasion, and may be little different from that due to other catarrhal inflammation, unless it be that the grippal inflammation brings about some special change in the secretions destructive of its supposed antiseptic property, which the other inflammations do not.

Whatever the direct cause may be, we know as a clinical fact that the grippe does destroy the normal resisting power of the tissues and predisposes them to infection to which they were previously more or less immune.

The pernicious effect of grippe is well demonstrated by the frequency with which pulmonary tuberculosis follows upon the footsteps of a grippal bronchitis, a clinical fact often corroborated and familiar to us all.

It is also shown by the readiness with which the accessory sinuses of the nose become the seat of suppuration, exhibiting one of the most painful and annoying complications of grippal rhinitis.

These cavities, although in direct communication with the nasal cavities, through the medium of their ostia or canals, normally exhibit a remarkable degree of immunity from the invasion of pus organisms which so frequently infest the nose. Particularly is this true of the maxillary sinus, the communication of which with the nasal cavities is through the ostium maxillare, a mere valve-like fenestrum in the middle meatus, and in spite of which may remain healthy while violent acute and chronic suppurative processes are affecting the nasal mucosa.

The invasion of these cavities may take place either during the acute stage of the grippal attack or come on weeks after, through the influence of renewed infection or a fresh outbreak of the primary attack.

In all, except the very mildest attacks of respiratory form of influenza, the larynx and trachea are early affected and more or less hoarseness and cough are usual, but these symptoms are sometimes extremely obstinate, especially the cough, the cause of which in the absence of physical signs in the lungs is attributable to a

hyperaemia of the tracheal mucous membrane, which can be readily recognized in most cases by laryngoscopic examination. The cough is not accompanied by much expectoration, but its persistency, by night and day, so fatigues the patient that the general health suffers, and one is easily led into the belief that the patient has incipient tuberculosis.

The usual cough sedatives and the expectorants are of little avail except as adjuncts to local treatment. I have found it most helpful to use in these cases one per cent solution of menthol and camphor in liquid albolene, sprayed into the throat and inhaled. A half of one per cent of cocain may be added if the cough is very harassing.

In some cases it has been necessary to advise country air and complete rest to obtain relief.

---

### **Miscellany.**

---

THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION HELD ITS SEVENTEENTH ANNUAL meeting in Birmingham, Ala., December 12, 13, 14 and 15.

There was a large attendance of members and the proceedings were considered by many the most interesting since the founding of the association. Besides the regular proceedings, a bronze statue of the late Dr. W. E. B. Davis was unveiled in one of the principal parks and presented to the City of Birmingham and the State of Alabama. The next meeting will be held in Louisville, Ky., Dec. 1905. Dr. L. C. Boshier, of Richmond, Va., was elected president; Dr. J. D. S. Davis, of Birmingham, 1st vice-president; Dr. W. D. Haggard, of Nashville, secretary; Dr. Chas. Rosser, of Dallas, treasurer; Dr. F. W. Parham, of New Orleans, was elected to the council.

## Society Proceedings.

---

### Orleans Parish Medical Society.

---

*President*, DR. M. J. MAGRUDER.

*Secretary*, DR. S. M. D. CLARK,

141 Elk Place, New Orleans.

In charge of the Publication Committee, DR. S. M. D. CLARK, Chairman,  
DRS. E. J. HUHNER and M. M. LOWE.

---

MEETING OF OCTOBER 22, 1804.

DR. MAGRUDER in the Chair.

DR. POTHIER read a paper, entitled:

#### **Gangrenous Pancreatitis.**

I wish to present tonight the report of an autopsy in a case of gangrenous pancreatitis which occurred in the service of Dr. Nelken at the Charity Hospital. Before doing this, however, I will review the etiology, symptomatology and pathology of the disease.

Gangrenous pancreatitis must be a rare affection in New Orleans, at least in hospital practice, for out of 3,000 autopsies which I have held during my incumbency as pathologist at the Charity Hospital since 1895, this is the first case recorded.

Pancreatitis, though obscure in its symptoms, has been known and reported by early writers. The earliest record that I could find on lithiasis of the pancreas is that of Panarolus in 1652, though Graaf is supposed to be the earliest in 1667. Since many have written on the subject and the majority ascribe lithiasis of the pancreas or cholelithiasis as the primary cause of the disease Opie lays especial stress on cholelithiasis as the most frequent cause of gangrenous pancreatitis as the calculi become impacted in the diverticulum of Vater and form a continuous passage, through which bile flows into the pancreatic substance, producing necrotizing and hemorrhagic inflammation. Pearce also gives cholelithiasis as one of the most frequent causes. The microbic infection resulting is entirely secondary, and is in no way an etiological factor. Ross and



Daniels, however, have reported a fatal case of pancreatitis due to accumulation of parasites in the pancreas.

The disease has been produced experimentally by several authors, notably by Flexner. He says that bacteria are capable of producing in the dog severe and often rapidly fatal forms of pancreatitis. In a few instances putrefactive bacteria develop in the injured organ and produce the characteristics of gangrenous pancreatitis.

Robson says that there are three ways of infection: First, by adjoining organs; second, from the blood; third, from the duct. He thinks the latter the more common cause.

The symptomatology of pancreatitis is obscure and there is no pathognomonic symptom. The following are the symptoms as described by Woolsey: The disease occurs mostly in men of middle life. It begins suddenly, with epigastric and colicky pains, later becoming general; severe vomiting, eructations, distention of abdomen, especially of upper part, rigidity and tenderness on pressure, singultus, collapse, face and extremities cold, often cyanotic and covered with a cold sweat; low temperatures, at times sub-normal, pulse small and rapid. Death ensues in a majority of cases in four or five days. These symptoms are rendered more probable in connection with corpulence, alcoholism, gallstones, gastric duodenal catarrh, traumatism and arterio-sclerosis.

According to Allen, pain in left lumbar region is a symptom differentiating pancreatic from cholelithiasis calculi. He also says that the diagnosis is based upon epigastric pain radiating to left or right, or through to the back, or top of left shoulder, followed by mellituria, fatty acids in stools, at times presence of calculi in feces, though this is rare.

Woolsey, in speaking of glycosuria, says that it occurs in the earliest stage and does not last, and is found in a small percentage of cases. He further states that leucocytosis is more pronounced in pancreatitis than in obstruction of the intestines.

Kinnicutt reports a case of pancreatic calculi, with sudden onset, acute pain in the back between shoulder blades; the pain went through the body and lodged in epigastric region; there was some nausea and vomiting and severe diarrhea, lasting 8 or 9 hours. There were two subsequent attacks, with same symptoms. The author states that it was impossible to differentiate from biliary colics. He further states that jaundice is only accidental.

In the case that I am reporting the symptoms were normal tem-

perature, distended epigastrium, jaundice developing 24 hours before death. There was nausea, pain and tenderness over area of gall bladder.

Mognihan says that there are no positive symptoms upon which we can have a diagnosis.

According to Opie, gangrenous pancreatitis is a late stage of hemorrhagic pancreatitis. The organ is generally found in an advanced stage of gangrene, and the lesion is generally more marked in the head, extending at times to the body and occasionally to the tail, though in the majority of cases death takes place before said extensive lesions. Lesions of the head of the organ are more dangerous and more rapidly fatal than those of the body and tail. Calculi are usually found either occluding one of the ducts or both, or disseminated through the organ. The calculi vary in size from fine gravel to the size of a walnut, the largest recorded measuring  $2\frac{1}{2}$  by  $1\frac{1}{2}$  inches. According to Mognihan, they also vary in number, as many as 300 having been found. These calculi are composed of phosphorus and carbon salts, magnesium carbonate and organic matter. It is to be noted that carbon salts are not normally present in the pancreatic secretion.

There are some cases reported with a large number of calculi, where no necrotic changes occur, but in which an interstitial hyperplasia occurred, the organ becoming fibrous, with dilated ducts. Wimier ascribes to bacteria the causative influence in producing calculi. Concomitant with gangrenous pancreatitis cholelithiasis is found. This condition is dwelt upon by the majority of authors and regarded as one of the principal factors of the disease.

Though the pancreatic tissue is found in advanced necrosis and the cells degenerated, there are some isolated spots corresponding to the Islands of Langerhans which are totally unaffected by the extensive change, and they seem entirely immune to changes occurring in the pancreas.

A peculiar pathologic condition found in this disease is the extensive fat necrosis of the omentum and mesentery. Langerhans called attention to this lesion in connection with pancreatitis; it was also noticed by Balser in 1882. The affected area is composed of necrotic fat cells, which are of an opaque, white or yellow color, in contrast with the translucent golden yellow color of the normal fat, frequently surrounded by a narrow hemorrhagic zone. This necrotic condition is not limited to the abdominal adipose tissue, but

has been found in the subcutaneous, pleural and pericardial fat. According to Klaw, Korte, Oser, Langerhans and Flexner, this necrotic change is due to the action of the fat splitting ferment of the pancreatic juice. Flexner has further demonstrated the presence of fat splitting ferment in the necrotic foci.

I will now report the case on which autopsy was held and attempt to bring out the special characteristics that it presented:

J. M., white male, aged 47, was admitted to ward 18 of the Charity Hospital on January 1, 1904. Symptoms of gangrenous pancreatitis were prominent previous to death. Temperature was normal, epigastrium distended, jaundice developing 24 hours before death. Patient complained of being nauseated and of pain and tenderness over area of gall bladder.

Autopsy: Time of death, January 8, 1904. Autopsy on same date.

External appearance: Body emaciated; scleræ yellow; pupils dilated; post-mortem rigidity marked; body being claimed, only abdomen was opened.

Liver: Abscess (necrotic), which seemed to be connected with hepatic duct; portal vein free from pus; fatty degeneration of liver; gall bladder full and free from stones.

Pancreas: The head of the pancreas was found to be gangrenous pancreatic stones were impacted in duct of Wirsung. No stones found in papillæ.

Small intestines: Adhesions between the pancreas, stomach and colon; omentum free from fatty necrosis.

In this case cholelithiasis was absent, and it is not possible that all the gallstones were expelled immediately before death, if they were present during life. The necrotic areas found in the liver were probably the cause of the jaundice and show that the infection of that organ can be secondary to that of the pancreas.

This case also demonstrates that gangrenous pancreatitis can be caused by lithiasis of the pancreas, and that the presence of bile is not the only cause of the disease. In this case the calculi were impacted in the duct of Wirsung, and there were none in the diverticulum, nor at the papilla.

Another interesting point exhibited by the autopsy is the absence of fat necrosis, though the lesion of the pancreas was extensive.

In conclusion, I will repeat what Lazarus has said, that spontaneous cure is the exception; and hope, with Benson, that the day is near when pancreatic calculi will be dealt with as are biliary calculi.



DR. SEXTON read a paper, entitled:

### **Pre- and Post-Operative Treatment of Surgical Cases.**

The question has often occurred to me, that some surgeons, at least, view all therapeutic measures as more or less empirical or useless, and lay too much stress on what can be accomplished by operative procedure alone.

Specialists in any line are prone to look upon any given subject from their point of view; from this fact, we are of the opinion that many surgical cases before operation are not treated as they should be, so as to prepare them for the great ordeal and shock incident to a major operation, and as a result of this lack of treatment, or proper preparation before operation, they are likely to have to be over-treated after or during the operation.

As a matter of course in emergency surgery, we often have no time for general treatment, but many other surgical cases are materially benefited by proper attention to their general health, the careful flushing out of the bowels, kidneys and liver; the regulation of the heart as to its beat and tone; respiration as to its depth and regularity, and the proper building up of the nervous system and the blood count by suitable medication.

We have seen much good result from dieting, tonic preparations of iron, quinia, strychnia and cascara, or preparations of iron and manganese preceding some operation, especially in anemic malarial subjects, which, without the previous building up, would hardly have been able to undergo the shock of any serious operative interference. In other cases, where the long drain of chronic diseased conditions have undermined the nervous and circulatory systems, much good may be accomplished by giving digitalis, strychnia and iron, till the heart is toned down by the digitalis, and the nervous system braced up by the action of the strychnia, and the blood count built up by the iron. As a matter of course, no imperative operation should be made to wait for the result of such medication, but the idea that we mean to convey is, that when any such case may have to wait from any cause, the period of such waiting should be utilized in the general upbuilding of the patient's vitality.

Many times surgeons are called upon to operate upon cases who have led rather fast lives; who have not only burned the candle at both ends, but have overtaxed the stomach, overworked the liver, and kept the kidneys choked with excrementitious material which should



have been flushed out. All such cases are very much benefited by thorough purgation with calomel and soda, or any other simple cathartic, if mercury is contraindicated. The thorough emptying of the bowels and stimulation of the secretions does away with half of the vomiting, which we have seen in cases which have not been properly purged before the operation.

Regulation of diet for several days previous to an operation so that no indigestible material is left in the alimentary tract is another important detail to look after. The greater the quantity of water imbibed and better the kidneys and bowels are flushed out, the greater the chance for the patient to stand the operation.

In emergency operations 1-4 grain of morphia, enemas of hot milk, coffee, and whisky tend to ward off shock. In any serious operation Prof. Smith recommends the previous administration of whisky almost to the point of intoxication.

This plan is more suitable to subjects accustomed to drink than to follow as a general rule. The application of bandages, formerly recommended to store up blood in the extremities, is not practiced to any extent at present, but the saving of all the blood possible by the Esmarch bandage and the elevation of limbs to be amputated is doubly important in all very young or old subjects.

Mikulicz found that blood regeneration in an operation in which 1 per cent of blood was lost was made up in from two to five days; that 3 per cent was made up in from five to fourteen days, and 4 per cent was regenerated within thirty days. Usually we expect the blood regeneration to be complete within fourteen days. Mikulicz never operates on a patient whose hemoglobin is under thirty per cent. In all anemic and accident cases where a great amount of blood has been lost this 30 per cent hemoglobin test is a good rule to follow, waiting, if possible, to build up the hemoglobin to the required 30 per cent standard before operation.

We often see mucous patches and syphilitic ulceration of mouth, tongue, and throat that in some degree resemble epitheliomatous growths so closely that it is hard to differentiate between the two. Recently I heard of a case under the treatment of a throat specialist who informed the patient that he had cancer of the tongue and tonsils, and must undergo a complete removal of those organs, with all the deformity and consequent inconveniences incident thereto. The pathologist had examined the tumor and reported it an epitheliomatous growth. It certainly looked suspicious, and had a cancerous

history, but behind all of this was also a vague syphilitic history. The patient refused to be operated upon without seeing another specialist, who, upon consultation, decided to try the test of free administration of iodide of potash and mercury, so the patient was given twenty, thirty and forty grain doses of iodide of potash three times daily, well diluted, after meals, combined with protoiodide mercury pills. The effect of the treaty began to show after the first week in diminishing the size of the ulcer and causing it to become paler and less hemorrhagic. Two weeks noted more marked improvement, and within a month the tumor had disappeared and the ulcer healed. In all cases of ulceration about the throat and tongue in syphilitic suspects, give the test treatment with iodide of potash and mercury before any operative procedure is suggested. The time required for the test is only one month. The power of iodide of potash and mercury in effecting such cures is almost miraculous. This recommendation if followed will clear up many suspicious diagnoses.

So much for pre-operative treatment. Let us now turn our attention to the patient who, from loss of blood, shock, anesthesia or any other cause, is *in extremis*, as the antiseptic details of modern surgery tend to prolong operations, and to the production of shock.

We can hardly speak of post-operative treatment without going into the definition and details of shock. The demand for treatment is usually brought about by the loss of blood, shock or fat embolism. The essential condition of each is anemia of the brain, fast, weak-acting heart, inhibition of nerve force, with reflex paralysis, exhaustion of the active force of the medulla oblongata and spinal cord, accompanied by subnormal temperature. The weakness of the heart's action, combined with the paralysis of the vascular tone, disturbing the circulatory balance, the abdominal veins become over-filled by gravitation, and the right side of the heart is greatly distended. These conditions necessarily lessen the amount of blood in the arteries. If this arterial pressure is very much lessened anemia both of the lungs and brain soon follow. A slight degree of shock may follow almost any traumatism or great loss of blood, but it is more severe in contusions and gunshot wounds of the viscera, crushing injuries of the extremities and testicles, and to burns and scalds extending to half or more of the body surface. We can differentiate hemorrhage from shock to some extent by the blood count, which should not fall below 3,500,000. The nature of

the injury will also assist in making the diagnosis. In shock, circulation is vitally depressed. It is supposed in crushed limbs to be brought about by nervous exhaustion caused by continuous and severe irritation of peripheral sensory and sympathetic nerves.

Rogers, in experimenting on frogs that he had shocked by electricity, observed that the spinal cord and muscles were not sensitive to drugs or stimuli, as, for example, strychnin failed in its effect upon the spinal cord. The tissues seem not to be able to react, or the strychnin seem to fail of passage from the blood to the tissues. These experiments, in part, explain some of the observations of Crile; namely, that powerful stimulating remedies fail in their mission to relieve exaggerated shock, and when given in too large doses may result in an absolute toxic effect upon the patient. The following observations of Crile, while some of them are contrary to our clinical experience, are worthy of note in this connection. Crile contends that nitro-glycerin, strychnia, alcohol and all other stimulants of vaso-motor centers tend, like traumatism, to the production of shock.

Where the operative field invades a part rich in blood vessels, and hemorrhage is hard to control, the amount of blood lost is often great in quantity, even though we use all the precautions possible by immediately clamping or tying every vessel that spurts. It is after such operations and in collapsed conditions that intravenous infusion and hypodermoclysis accomplish such good results by raising blood pressure, stimulating the endocardium, thus exciting the heart to action, filling up the empty blood vessels, and stimulating the anemic brain. The amount of saline infusion should be governed by the amount of blood lost, and its effect upon the pulse. It is better to stop at two pints, if the pulse is restored, taking the chances of having to repeat it again if required rather than to bring about pulmonary edema, for Crile found, when the infusion amounted to 320 c.c. per kilo., the fluid accumulated in the splanchnic are and embarrassed respiration by mechanical fixation of the diaphragm and ribs. We have seen pulmonary edema increased by using intravenous infusion in a case of albuminuria, with suppression of urine.

Crile had the most lasting effect when, to his saline infusion, he added 1-50,000 adrenalin. He resuscitated animals that had been dead for ten minutes by these infusions, combined with rhythmic pressure on the pericardium and artificial respiration.



We may have delayed shock after an operation is completed; hence, the importance of keeping the patient quiet and comfortable, with the foot of the bed raised, if much blood has been lost. During collapse the best clinical results are obtained medicinally by the hypodermic administration of 1-30 grain of strychnia, combined with 1-60 grain digitalin. If we could foretell in any given operation that shock was liable to occur, it would be well to reinforce our patient by giving him either a stiff toddy, 1-4 grain of morphia, 2 grains citrate caffein, or a hot cup of coffee an hour or two before operating.

When from any cause serious, profound shock is produced only the necessary interference to check the hemorrhage and stop the pain should be attempted, and even that should be done without the aid of anesthesia; morphia, under such circumstances, acting better than ether or chloroform. The exception to this rule is, when the shock seems to be aggravated by a crushed, painful limb, it is better to amputate under the influence of morphin and ether, thus removing the cause of the shock. The blood should be forced into the more vital parts by raising the limbs, if not injured, rather than by bandaging the extremities. Dry heat and mustard, with friction, to be applied freely; flannel cloths, wrung out of hot water and sprinkled with turpentine, should be applied over the precordial region. In some of these cases the most powerful stimulation fails to act. When from either shock or anesthetic, respiration or circulation stop from anemia of the medulla oblongata, the head down or inverted position, combined with artificial respiration, with rhythmic pressure upon the heart, afford the best chance for relief. Artificial respiration, with chest compression, not only brings in new oxygen, but expels whatever chloroform or ether vapor remains with the residual air. It is then that artificial respiration, lowering the head, infusion and faradization, come to our relief, with one pole of the battery over the phrenic nerve and the other over the diaphragm, we can tide over some cases that otherwise might prove fatal. We should not try to force hot, stimulating drinks down a patient who can not swallow, as fatal strangulation may result, but if deglutition is not impaired 10 minim doses of the tincture of digitalis dropped on the back of the tongue slows down the fast, weak-acting heart, but its cumulative effect should be remembered, and it should not be repeated too often, as cardiac failure might follow over-stimulation of this organ.



Many times the patient, being operated upon, is not kept warm enough. Moisture from wet towels and dressings are left to be evaporated by the latent heat of the body. During the winter months in cold climates, at least, the operating room should be kept at 72° F., and with some cases it is best to have the operating table heated by coils of hot water circulating underneath the table. Shock is superinduced by chilly draughts, and at no time during operation should a patient be uncovered except the actual part to be operated upon. The patient should be kept warm when going from the operating room to his private bed, which should be well heated before he is moved into it. In all our treatment, to bring about reaction, we should stop short of producing overaction and its sequence, which is secondary hemorrhage. Whenever it becomes necessary to operate upon one who is very old, it is important to reinforce their vital powers by a tonic course of strychnia a week or more before the operation, as it does much more good in this way than when given on the operating table. Confinement in bed is very damaging to these old people; they ought to be propped up in bed, or removed to a chair just as soon as it is practicable after an operation. It is important to perform as bloodless operation as possible upon the old subjects as well as the young.

In these conditions of post-operative shock do we not, under some circumstances, overtreat the case? Many times, with the heart scarcely beating for the lack of blood stimulation, with respiration sighing and shallow, with patient bathed in cold respiration, we have seen one hypodermic injection after another, containing stimulating poisons, given in such quick succession that we may well pause to ask ourselves the question: Are we not confusing and overpowering a circulation and respiration almost extinct by the rapid successive administration of such strong drugs as nitro-glycerin, strychnia, digitalin, atropin and morphin, into a subject already weakened by a general anesthetic, loss of blood, shock and collapse. Under the excitement of such conditions, proper time very often does not elapse from one dose to another to see what the effect will be. Again, drugs having diametrically opposite effects are often used and stored up in the system. We are not claiming this to be a common practice in well-regulated operating rooms, but I am sure that many of us have witnessed cases in which the post-operative treatment was overdone. It has always been my idea that if surgeons spent more time in getting the patient in proper condition

to stand the operation, in having everything in readiness, assistants trained in what they are expected to do, and also that the least possible time is consumed in performing the operation, that all lectures and explanations be suspended until the operation is finished, that much less of the first necessary poison, viz.: the anesthetic, would be required, and that we would have fewer cases *in extremis* to deal with after operative procedures.

#### DISCUSSION.

DR. DABNEY was convinced, though not having had an extensive personal experience, too great a number of patients were taken upon the table without having been properly prepared. He believed that many cases were lost in surgery which could be saved by paying attention to preparations.

DR. CLARK believed that many of the surgeons of to-day did not pay enough attention to the preparation of the patient prior to operative treatment, as well as the post-operative attention which it should receive. It had been his good fortune to be associated with Dr. Matas while serving his hospital course, and it was from him that the importance of thoroughly preparing a patient was impressed upon him. The free administration of water was, in his mind, a very important factor in the proper preparation of a patient for surgical treatment. He was convinced that too much stimulation was used as a routine in many of our wards at the hospital, especially during the operation and immediately afterwards. He had recently used morphin in small doses hypodermatically in combating post-operative shock, and had found it a valuable agent. During the summer, when visiting some of the large clinics in the East, he noted that it was largely a routine practice to wash out the stomach at the close of the operation, they believing that it greatly lessened the post-operative nausea. The question of position after operation was an important one, and it seemed to him that in cases that were operated upon in the pelvis the nearly upright position was strongly indicated. The title of the paper under discussion covered so broad a field that it was impossible to attempt to speak upon the many points that were of great moment to all men who did surgical work.

DR. J. F. OECHSNER spoke of the nervous element as a prominent factor in the production of shock, citing Dr. Mellish's recent article upon anesthesia. Operators frequently unconsciously frighten their

patients by unnecessarily discussing with them the various steps of the operation, and the whys and wherefores. He had recently seen much operative work where ether was used exclusively, which impressed him the more that we use in our work in New Orleans too much chloroform. Ether should be the anesthetic of choice. The method of administering an anesthetic was also a vital point in the production of shock. The operator should not sacrifice time, and should operate as rapidly as possible when consistent with good work. He thought that we all used stimulants excessively, especially at the critical moment of the operation, when absorption was poor or nil and mechanical means would give better results. Dilatation of the sphincter ani was a powerful stimulant to respiration.

DR. CHASSAIGNAC wished to mention a case that had come under his observation, which served to show just how important it was to eliminate the possibility of a tumor being of syphilitic origin, prior to attempting surgical relief. The patient came to consult him for some urinary trouble, when the doctor noticed a tumor in the preauricular region. When questioned in reference to the tumor, patient stated that a prominent surgeon had diagnosed the condition as one of sarcoma, had operated upon it, and that a microscopical examination had confirmed the diagnosis of sarcoma. The tumor shortly afterwards began to recur. The X-Ray was then applied without effect. Cataphoresis was advised, and the surgeon had given a very gloomy prognosis. Dr. Chassaignac, remembering that when formerly treating the patient he had suspected a specific taint, placed him upon mercurial inunctions, with twenty grains of iodide of potash three times a day. In one week the tumor had not grown, something that it had been doing steadily previously. In two weeks the tumor showed signs of diminishing, so he increased the iodide of potash, giving one drachm three times a day. The patient left, very jubilant, on a trip three or four weeks after the inauguration of the treatment, the tumor having diminished very decidedly. The doctor had received a letter from the patient recently, and he reported that he was entirely well. The case was mentioned for the purpose of pointing the lesson that when in the least doubt as to the presence of syphilis, we should give the patient the benefit of it and specific treatment. He did not regard microscopical examination as infallible, since it was a very difficult differentiation to make between gumma and sarcoma.

DR. LARUE mentioned a case which pointed the same lesson as



that reported by Dr. Chassaignac. Three years ago a male patient came to him for an ulcerative condition at the bend of the left elbow. He first thought it was an epithelioma, but, being in doubt, gave the mixed treatment. The condition did not improve, so he operated, with complete cure. Microscopical sections of the excised mass revealed a tubercular gumma. Two months ago the patient returned to his office with an identical condition on the other arm. This time he thought it might, after all, be syphilitic, so he gave iodide of potash and proto-iodide of mercury and cured the condition.

DR. PERRILLIAT was willing to admit that energetic stimulation was carried too far in many cases, but he believed that when it was used with judgment, especially in combating shock, it was a most valuable agent. He related a case that he had observed during his service as a hospital interne of shock following a stab wound of the ventricle of the heart, where examination of the precordia revealed only very faintly the presence of heart-beats, the patient's extremities were cold and clammy, and his condition was thought hopeless. The house officer, thinking that the condition was beyond treatment, sent the patient into the reception room to await death. Dr. Perilliat asked permission to use stimulation as he saw fit. It was granted. The foot of the bed was elevated, heat was applied by hot cans, and strychnin, one-tenth of a grain, was given hypodermetically the first hour, then every two hours. The accident occurred at 11 A. M., and at 6 o'clock in the evening the patient had rallied, and had to be given bromide of potash to counteract the effect of the strychnin, from which time he made an uninterrupted recovery. He cited the case to illustrate what could be gained by energetic stimulation. In the gynecological service of the Charity Hospital it was thought wise to avoid the use of digitalin as a post-operative cardiac stimulant in cases such as follow the removal of broad ligament tumors, where oozing is expected. Digitalin increases arterial tension and might perhaps start afresh a bleeding surface, which, at the time of the operation, was checked by heat, posture or otherwise.

DR. PERKINS regarded the Fell-O'Dwyer apparatus one of the most dangerous weapons brought into the operating room. He thought that intra-laryngeal reflex often produced shock and that the instrument was introduced often in a bungling fashion, and respiration was obstructed at a time when a few seconds were of vital importance to the patient. He had often seen cases treated for



shock when all they needed was the pulling forward of the jaws. He looked upon strychnin as a most valuable stimulant, given in large doses hypodermatically. Strychnin when given boldly and judiciously was, in his opinion, one of the best agents to combat shock. He thought that a preliminary infusion of saline was valuable in cases of sepsis, where it was desired to lift the patient to a plane where he could stand the operation. He had seen instances where there were not enough attendants present to meet the indications in treating emergency cases. Blunt dissection was the cause of much shock. Clean cuts should be made and one should guard against pulling and tearing apart the tissues.

DR. JACOBY had given 1-15 of a grain of strychnin hypodermatically and 1-25 of a grain of digitalin at a time when he desired the action of the drug, and had not witnessed anything but good results. Infusions of salt should be given intravenously at 120° F. if the best results were to be expected. He thought we should use less chloroform and more ether. The operation should be as short as possible, always in consistency with safety and thoroughness.

DR. MILLER spoke of the importance of a proper preliminary preparation in all operations upon the vagina and pelvis. It was remarkable what rest would do in preparing a case for surgical operation. By placing the patient in a recumbent position, using copious vaginal irrigation, ice bags, purgation, etc., he had seen acute conditions subside and become far more suitable for operation than they would have been without treatment. He cited the case of a large swelling in the pelvis, which, upon rest, had subsided to the size of a normal ovary.

DR. SEXTON, in closing, said he was glad that his paper had been discussed, for he thought that it was of importance to every medical man.

---

#### MEETING OF NOVEMBER 26, 1904.

DR. MAGRUDER, President, in the Chair.

DR. BATCHELOR read a paper entitled

#### **Undescended Testicle—Report of Two Cases.**

My reason for presenting this subject to-night is the frequency with which this condition is encountered in operating for inguinal hernia. It is said that undescended testicle occurs once in five hun-

dred cases, these statistics being obtained from the records of the Austrian Army. In 125 operations for inguinal hernia I have encountered this condition four times. Under such circumstances the operator is confronted with the question of what disposal is to be made of the organ. Formerly the habit was to remove the testicle, or to replace it within the abdominal cavity. I think this disposition of the testicle was dependent upon the fact that no satisfactory operation had been devised by which the testicle could be replaced permanently in its natural position, for most surgeons recognize the importance of replacing the testicle in the scrotum if possible. It seems to be well proved that testicles retained in the abdominal cavity are prone to undergo malignant degeneration, and that these organs, when retained, are usually functionless. When situated in the inguinal canal or near the internal ring the testicle is much exposed to traumatism, and if complicated with hernia, which is the rule, the wearing of a truss is attended with much pain and inflammation of the misplaced organs. On the other hand, there are reasons to believe that if the testicle be brought down sufficiently early in the life of the patient development of the organ is much favored, and the chances of functional development is vastly greater than if allowed to remain in the abnormal position. Aside from the danger of malignancy, traumatism, sterility, psychologic influences must receive due consideration. In one of the patients reported to-night mental distress, due to the absence of both organs from the scrotum, was such that the mother of the child asked for surgical interference. The operation performed on these two cases is that devised by Dr. Arthur Bevan, of Chicago, to whom credit is due for placing this among well-recognized surgical procedure.

Case 1.—T. B., age 23: Diagnosis, left inguinal hernia, with undescended testicle, palpable at internal ring. Hernia of 8 years' standing. Testicle had occasionally entered canal, but could be easily returned, and had never caused any inconvenience. Patient had never worn truss. Operation performed October 13. The usual incision for hernia being made, the vaginal process was exposed, drawn down and divided above. Testicle ligated and returned to the cavity. The testicle and cord were then separated by blunt dissection up to the point at which the vas turns downward and inward, the spermatic vessels upward and outward. An attempt was now made to draw the testicle down to the scrotum. This was ineffectual; the spermatic vessels were now ligated at two points and divided,

leaving only the artery of the vas. It was now found possible, after some further separation of the vas, to bring the testicle down to its normal position, a pocket having been made in the scrotum by blunt dissection for its reception. The testicle was retained in position by means of the purse string suture placed at the neck of the scrotum. The remaining steps of the operation were those employed in the Bassini operation, except that the cord was not transplanted.

Case 2.—B. S., age 10: Fell under my observation September 24. Diagnosis: Cryptorchism. Patient was brought by mother for relief of this condition, which had been brought to her notice by the child, who had been the object of ridicule among his companions. Examination showed the absence of both testicles from the scrotum, one of which could be palpated above the internal ring. Operation performed September 28. An incision three inches long was made one inch above and parallel to Poupart's ligament, only extending to the external ring. The vaginal process was found to extend down the canal to the external ring, but not into the scrotum. By traction on this process the right testicle was brought into view; the process was then separated from the testicle, and the cord up to the point of divergence of the vas; and spermatic vessels were then ligated above the testicle and returned to the cavity. Considerable difficulty was experienced in bringing the testicle down and was eventually accomplished only after ligating and dividing the spermatic vessels and completely denuding the vas. It was then possible to bring the testicle down one inch below the external ring and to replace it in a very small scrotum, where it was retained by a purse string suture. The left testicle was situated high up below the kidney. Traction on the vaginal process, which had also traversed the canal to the external ring, was of particular assistance in bringing the testicle within reach of the fingers. After much patience and blunt dissection, with division of the spermatic vessels and complete denudation of the vas, the testicle was eventually brought down and placed in the scrotum. Both wounds were closed, as in the Bassini operation, except that the cord was not transplanted, but brought out between the pillars of the external ring. Twenty-four hours after the operation the scrotum became ecchymotic and swollen, but with the application of the ice bag this subsided and the patient was allowed to get out of bed in twenty-one days. Both patients were examined one month after operation and the testicles found to be in place. From a consideration of the dangers existing, if the testicle be allowed



to remain in an abnormal position and further consideration of the ease and certainty with which replacement can be done, I feel justified in asserting that to cryptorchids or monorchids should be allowed the privileges of this operation. The operation should be recommended.

#### DISCUSSION.

DR. MARTIN said that he was very much interested in Dr. Batchelor's paper. He had never done the operation, but he had seen it done twice. Dr. Bevan's operation made it practicable in most cases. He agreed that it must be done in youth, as the best results are then obtained, not only as to the development of the testicle, but as to the closure of the ring. He stated that on November 12 he had operated upon a patient, 42 years of age, for hernia of both sides and with both testicles undescended. On the right side the testicle lay in the canal, quite superficial, and presenting a small tumor, elevating the skin half an inch; the internal ring was sufficiently patulous for the index finger to be introduced, and on this side he had suffered from a strangulated process of the gut, which had been reduced and which was the chief factor in causing him to seek relief. The left side presented practically the same condition, except that the testicle, though also in the inguinal canal, was not so prominent. The oblique muscles on both sides were thinned and the fibers of the internal oblique were almost absent. Realizing the condition to be confronted here, he advised his patient to allow him to replace the testicles in the abdominal cavity so as to firmly close the canal, if he found that it would weaken the internal ring by placing them in the scrotum. The patient consented, and on opening the cavity he found the testicles lying quite loose in the canal, and with little difficulty they could have been brought down into the scrotum. However, the atrophied and undeveloped condition of the surrounding structures prompted Dr. Martin to return the testicles into the abdominal cavity and to close the canal entirely; first, because it hardly seemed possible to stretch the cord sufficiently to perform the Bassini operation; and, secondly, he thought that a Ferguson operation would leave a weak spot for future trouble. The patient made an uneventful recovery and left for his home fourteen days after the operation. The doctor noticed two points in this case: First, the vaginal process of the peritoneum extended even into the scrotum; and, second, though this man had been married for



twenty years to a woman in excellent health, she had never borne a child, proving that this man was sterile.

DR. DELAUP commented upon the fact that all of these cases of double cryptorchism are sterile, and that if we hope for any cure of this condition, the operation must be performed at an early age. The operation of Dr. Bevan is so recent that we are not able to tell yet what would be the result in curing the sterility.

DR. BATCHELOR, in closing the discussion, stated that Mecki had made microscopical examinations of the undescended testicle, and that his examination went to show that from this standpoint, at least, we can expect the gland to develop its normal condition.

DR. ELLIOTT, JR., read a paper, entitled

**Myelogenous Leukemia, With Report of a Case.—  
X-Ray Results.**

Mr. R., aged 43, native of Louisiana.

*Family History*.—Father died, aged 30; cause not given. Mother living; age, 62; healthy. Four sisters, all living and healthy. No history of phthisis in family.

*Personal History*.—Had the usual diseases of childhood; no diphtheria or scarlet fever, and no severe traumatism is recorded. Was sent to Germany at the age of 15, and remained there three years, and while there contracted syphilis (this fact was not discovered until the last month of his life). He was treated by inunction of mercury, and given iodide of potash for two years. At the age of 24 he became a traveling salesman, and continued in this work until the age of 39, without any history of illness, and having an average weight of 160 pounds.

In 1900, when 39 years old, he became very tired of regular work, and was constantly desirous of changing location, and became a monomaniac on the subject of religion, so much so that he was found by his family preaching at the street corners of a Western city. About this time he commenced to have pains in the left hypochondriac region and was treated for malaria. At no time did he drink or smoke.

The case was first seen by me in July, 1903. He consulted me on account of pain in the region of spleen and general aches over long bones. A thorough examination revealed the following:

*General Appearance*.—Well built; height about 5 feet 10 inches;

weight, 150 pounds; large bones; abdomen rather prominent; dark, pigmented spots on neck and cheeks, not marked by anemia; wears glasses; eyes rather prominent; movements very nervous and jerky.

*Heart* showed at this time no murmurs, and only slight hypertrophy of left ventricle. *Lungs* normal. *Liver* enlarged, about 4 1-2 inches in mammary line. *Spleen* very much enlarged and tender, projecting 3 inches below costal arch. *Kidneys*.—Evidences of albumin and hyalin and granular casts. *Pulse* regular, not very full, about 85 to 90 per minute. No glandular enlargements anywhere palpable; muscles flabby; a tendency to cramps in legs; is always constipated and has a large appetite.

An examination of the blood at the time showed the following: Myelocytes, 45 per cent; red blood corpuscles, 4,000,000; white blood corpuscles, 160,000. A diagnosis was accordingly made of myelogenous leukemia, and patient placed on Fowler's solution of arsenic, 5 drops three times daily, to be increased to 10 drops three times daily in one week's time, and after that one drop more to be added daily until 20 drops three times daily were taken. He was also ordered to take glycerinated extract of red brown marrow, 2 drachms three times daily, to take no alcohol and to keep the intestinal tract clear. At about this time I saw the article by Dr. N. Senn,<sup>4</sup> and decided to have the X-Ray used in conjunction with the other treatment, and at the time turned the case over to Dr. Guthrie, who has kindly reported as follows:

Patient was given exposures every other day and began to improve at once. On September 6, 1904, blood count gave the following:

Red blood corpuscles, 4,400,000; white blood corpuscles, 50,000; myelocytes, 4 per cent; hemoglobin, 55 per cent. Normoblasts present; no megaloblasts. Spleen becoming smaller. Less pain in bones.

September 27.—Red blood corpuscles, 4,160,000; white blood corpuscles, 160,000; myelocytes, 24 per cent; hemoglobin, 60 per cent; normoblasts, 10 in count of 500 leucocytes. Patient feeling well. Is attending to his office work. Has good appetite.

November 22.—Red blood corpuscles, 4,620,000; white blood corpuscles, 78,000; hemoglobin, 65 per cent. Treatment given very irregularly, on account of absence of patient from city; had periods of "perfect health," followed by depression.

January 27.—Red blood corpuscles, 5,060,000; white, 68,000.

Only two or three exposures were given after this date. The

spleen was barely palpable. Still had pains in long bones, and was becoming visibly weaker.

I was recalled to patient about February 20, 1904, by Dr. Guthrie, and found him more anemic than when seen last in July, 1903. He complained now of constant pains in legs and back, radiating around to region of liver and spleen, and declared that it was impossible for him to lie down.

On examination found a blow with first sound of heart at base, hemic in character; lungs normal; liver, still much enlarged; spleen smaller than in July, very hard, with rounded and thick edges, projecting only about one inch below costal arch and only slightly painful on pressure; urine still contained albumin and casts and there was a slight discharge from urethra, gonorrheal in character. Patient was very irritable and constantly harped on religion. The pain in back was evidently a hyperemia of the spinal cord, so I placed him on enormous doses of bromide of potash and chloral and used counter-irritation over spinal cord, without any relief. Dr. Bloom was now called in consultation. As we had forced out of the patient a history of previous syphilitic trouble, we thought that we might give some relief by the use of inunctions of mercury, with ascending doses of iodide of potassium. Extract of hyoscyamus, in one grain doses, three times daily, was also given to allay his mental condition. All medication seemed to be unavailable, and on February 29, three weeks after the onset of the spinal pain, the patient, while standing, felt his legs suddenly give way under him, and had to be supported into his bed, and on examination I found a complete paralysis of both legs, bladder and rectum, with retention of urine and feces, but with much less pain; temperature  $99\frac{1}{2}$  F. During the next two or three days the patient was comparatively comfortable, the urine being drawn three times every 24 hours and the bowels emptied by enemata. In spite of every precaution a violent cystitis developed, with high fever and violent pain. Warm boracic solution was used several times to cleanse the bladder. On March 7, nine days after the hemorrhage into the cord, the temperature had climbed to 103 F. in the afternoon, with a slight morning remission. The spleen was growing visibly day by day and becoming tender to the touch. On the tenth, control of bladder and rectum was completely lost and spots of necrosis appeared on both heels and buttocks. On March 17 the fever became so uncontrollable and pain over region of spleen so intense, that we



decided to puncture the spleen. Under local anesthesia, I aspirated two ounces of blood from that organ and can report that the relief was immediate. An examination of the aspirated blood showed:

Polymorphoneutrophiles, 55%; large lymphocytes, 8%; small lymphocytes, 1%; myelocytes, 31%; eosinophiles, 4%; basophiles, 1%.

While the withdrawal of blood seemingly gave some relief from pain, the spleen still continued to enlarge and the day before his death extended almost to the umbilicus. The fever ranged between 103 and 104 F. and pulse 140 to 150, with marked costal respiration and the end came on March 28, without any convulsions.

No autopsy was allowed.

The nomenclature of leukemia, as all else about this interesting disease, is a matter of controversy, for while we find that modern authors divide it into the two forms, lymphatic and myelogenous, these terms are not true pathologically.

Kelly, Reed, Newman and others have proven that in every case of the lymphatic type, we find some involvement of the bone marrow, while only one case of the pure myelogenous form has been reported (Churchill<sup>1</sup>). It would simplify matters much if we should use the term lymphocytic and myelocytic, according to the predominant leucocyte present, and just as scientific, in view of our ignorance of the true etiology of the disease. That we are in absolute darkness as to the true etiology of leukemia, the excellent article by Nichols<sup>2</sup> proves conclusively, even to the most hopeful and enthusiastic investigator.

That there are certain predisposing factors is not doubted, and of these heredity, traumatism, malaria and syphilis are the most prominent. We will discuss these seriatim.

*Heredity.* The strongest case cited in support of heredity as a causative factor, is given by Cameron<sup>3</sup> where the disease was prevalent in one family for three generations; unfortunately, in comparison to the total number of cases reported, those showing such **direct or even remote inheritance**, are extremely rare. Cameron concludes his article with the query: "Although a mother does not transmit leukemia directly to her child, is it not probable that she may transmit a tendency thereto?" I must thoroughly agree with him. We should endeavor to trace back for at least three generations the heredity of our leukemic cases before stamping them as idiopathic.



*Traumatism.* Of the last four cases of which I have record, three give a definite and comparatively recent history of trauma of great severity; undoubtedly the predisposing cause in these cases, lighting up a hyperplasia in spleen and bone-marrow, already kindled by some as yet unknown germ, parasite or toxin, or what not. Here again we find that to the total of all cases traumatism bears a small ratio.

*Malaria.* Chronic poisoning with the malarial parasite has been reported in about one-fourth of all recorded cases, according to many authors, and if this be a true estimate, we, of the Charity Hospital of this city, certainly have a fertile field for investigation in the proving or disproving of this predisposition. In what way malaria excites the development of the leukemia is a matter of conjecture, unless it be that the chronic enlargement of the spleen in that disease lowers the resisting power of that organ. It may be a matter of interest to note here that I have been unable to find any reference as to which form of leukemia is most frequently preceded by a malarial history.

*Syphilis.* No case has been reported where a specific history has borne a definite relation to the development of a leukemia. It may readily be imagined, however, that we would expect a greater hyperplasia of liver and spleen in a leukemic patient suffering with syphilis, than in a non-specific case.

Let us review hurriedly the three theories as to the etiology of leukemia as summed up by Nichols:

(1). *Toxic Theory.*

Are the phenomena of leukemia due to circulating toxins? If so, why should not a leukemic mother give birth to leukemic children? No such case is on record. In the cases reported by Cameron, the children were seemingly healthy at birth and did not develop the disease until they had taken the mother's milk. A blood count from these infants immediately after birth might have told a different story. If the disease be caused by toxins the injection of blood serum from leukemic patients into animals should set up a leukemia, but of 123 inoculations made, in not one instance was any such effect produced.

(2). *Parasitic and Infection Theory.*

Microscopical and cultured investigations in 80 cases of leukemia in man have been practically negative with reference to the find-

ing of any bacteria etiologically connected with the disease (Nichols.)

The protozoa claimed to have been found by Lowit in the bodies of the white cells, have on further investigation by Turk and others proved to be only nucleoli of degenerated leucocytes. The only case of contagion is that reported by Obrastzow, where a nurse, 41 days after attending a fatal case of leukemia, developed the disease and died.

Senn<sup>4</sup> firmly believes in the microbic theory.

(3). *Cancer or Hyperplastic Theory.*

This theory asserts that leukemia is a "cancer of the blood" (whatever that may mean.) Virchow held that active proliferative changes in the lymphadenoid tissue is the pathological foundation of the disease and the source of the increased number of leucocytes in the blood. (Stengel<sup>5</sup>).

Evans<sup>27</sup> thinks that in myelogenous leukemia the myelocytes are cast into the circulation because of increased activity of the myeloid tissue of the bone-marrow, which tissue *alone* is affected.

Williams<sup>28</sup> declares that leukemia is a leukosis or white cell hyperplasia.

It might be well here to notice the strong likeness between cancer and leukemia; the predisposing causes are identically the same. Identically the same inoculations and experiments have been tried to find the true etiological factor. The analogy is still more striking when we consider the effect of intercurrent disease on the two just as we find erysipelas exerting a restraining influence on the development of the cancerous growth. So in leukemia we find numerous examples where tuberculosis, influenza and other acute infectious diseases, have caused a temporary bettering of the leukemic symptoms.

Dock<sup>6</sup> reports a case of myelogenous leukemia where the leucocytes fell from 367,000 to 75,000 in three weeks, following an influenzal attack.

Elsner and Groat, Stintzling, Quincke, all report cases showing the inhibitory action of acute and chronic tuberculosis on the leukemic development.

Of these theories, I am strongly disposed to accept the last.

The pathological picture in myelogenous leukemia is fairly constant. We find the spleen enlarged always. Sixer reports a case weighing over 16 pounds. The capsule is much thickened, the

connective tissue greatly increased, the malpighian bodies scarce, great proliferation of lymphoid cells, the blood not easily coagulable. The liver, also, is generally enlarged, fatty changes are constantly present, with mitoses in the dilated capillaries. In the bone-marrow we find a great increase in the cells; though soft at first it soon becomes congested and hyperplastic, hemorrhages follow.

Turk reports a case with a greenish discoloration of the bone-marrow, smears from which showed neutrophile-myelocytes and their derivatives.

This hyperplasia gives rise to greatly increased tension and is the cause of the pains in the long bones.

The first symptom that attracts the attention of the patient is generally pain in the region of the spleen, though a violent hematemesis has, in a case reported by Osler,<sup>7</sup> been the first, last and only symptom; bleeding from the gums, diarrhea and pains in the bones, occur intermittently. Anemia is not present until late in the disease and we must bear in mind that leukemia is not primarily an anemia. When anemia has become a prominent feature, we begin to have attacks of dyspnea, dizziness, palpitation of the heart and, later, great pains in the long bones becomes the chief complaint, with increasing weakness, periodic attacks of diarrhea, increased pain in region of spleen and the case ends with an apoplexy or high fever, septic in character.

The diagnosis of myelogenous leukemia rests upon three signs. (1) The presence of myelocytes in the blood; (2) An enormous increase in the number of leucocytes; (3) An absolute increase of eosinophiles.

Stengel describes the myelocyte as "a large mono-nuclear leucocyte, five times the size of the red blood corpuscle, with a nucleus poor in chromatin and the protoplasm containing abundant neutrophilic granules; they are identical with the large granular cells of the bone-marrow and are held by the French authors to be simply hypertrophied leucocytes. Muller holds that they are a distinct formation from the leucocyte. In 12 cases reported by Da Costa,<sup>8</sup> the myelocytes average about 20%. In those reported by Hektoen and Reisman the average was 37%, and in my cases 36%. I wish to emphasize here the fact so strongly pointed out by Hektoen and Reisman and by Wilkinson,<sup>10</sup> of the impossibility and uselessness of drawing any hard and fast lines in the making of a



differential count on account of the transitional forms. Wilkinson recites a case which, though typically myelogenous at first (judging from the blood), became in less than two weeks just as typical of the lymphatic type.

The great excess of white corpuscles is a most constant factor averaging about 300,000 per cu. m. m. We must bear in mind, however, that they may fall to 30,000 or less at any time and without any medication. Lerch,<sup>11</sup> Hebert and Smyth,<sup>12</sup> report cases where the white outnumbered the red. In my review of cases the average white count was 540,000 per cu. m. m. The absolute increase of eosinophile is insisted upon by Ehrlich as a most valuable diagnostic sign, but Simon,<sup>13</sup> Hirschfeld and Alexander, and others, have reported cases of typical myelogenous leukemia without such increase. Normoblasts are generally present while megaloblasts, if found at all, few in number.

In the very beginning of any discussion of the subject of the treatment of leukemia, we should bear in mind two facts: *First*, That up to the present time recovery from this disease is of the rarest occurrence. *Second*, That without medication of any kind periods of almost perfect health may and do occur during its course.

Arsenic is the drug of all others that has given the greatest and most lasting benefit. Colin Campbell,<sup>14</sup> Heaton,<sup>15</sup> Nammack,<sup>16</sup> Bryant and Crane,<sup>17</sup> Cabot,<sup>18</sup> Taylor,<sup>19</sup> Simon and Campbell,<sup>20</sup> Hare,<sup>21</sup> and Barlow<sup>22</sup> all report cases where periods of normal blood count have followed the use of giant doses of Fowler's solution. Toulmin and Thayer<sup>23</sup> report a case where the white count fell from 714,000 to 75,000 and the myelocytes from 23% to 4% in 23 days on ascending doses of arsenic, while McCrea reports a case showing two periods of absolutely normal count within two years, under its use.

Next to arsenic in efficacy comes the extract of red bone-marrow, the two being frequently used in conjunction.

Bigger<sup>25</sup> reports a case cured (?) for a period of six months by the use of fresh bone-marrow after a total failure with arsenic alone.

The use of inhalations of oxygen in combination with arsenic has produced a few remarkable symptomatic cures. Da Costa and Hershey<sup>26</sup> report two cases of its use. In the first, with a red count of 3,000,000 and white of 165,000, 20 to 34 litres of oxygen were given



daily for two months, with an increase to 4,500,000 for the red and a fall to 14,000 for the white corpuscles. In the second case, with 2,400,000 red and 580,000 white, 30 to 60 litres of oxygen were given daily and in one month the red had increased to 4,650,000 and the white fallen to 142,000. The oxygen was used in the belief that it would take the place of the diseased spleen in the changing of the white into red blood.

F. Taylor used 30 litres of oxygen daily and 45 minims of arsenic three times a day and caused the reds to increase from 2,000,000 to 3,630,000 and the white to fall from 1,000,000 to 29,000 in one and a half months; but the case relapsed in six months.

Henck and Beitzke have used injections of tuberculin in cases of leukemia, but with little success, save in the temporary reduction of the leucocyte count.

Leucatello and Malon used a leucolytic serum and claim to have met with some success.

The use of the X-Ray in leukemia has come forward prominently in the past year through the report of a case by Senn, though both Pusey and Stover had previously made similar experiments.

I have collected from recent medical literature and beg to report 15 cases (including my own) of myelogenous leukemia treated with the X-Ray, giving the name of the observer, blood count before the use of the X-Ray, the duration or number of exposures given, the blood count after termination of treatment and the present condition of those cases that I have been able to obtain through personal communication.

Of the 12 cases followed to September, 1904, six have died, 4 have relapsed, two are stationary or improved, and yet only eighteen months have elapsed since treatment was begun in the first case.

From a study of the foregoing cases I think we may safely conclude that the X-Ray has certainly no advantage over arsenic in the treatment of this form of leukemia, that it causes the spleen to shrink, relieves the pains in the bones and causes a reduction in the leucocytes is undeniable, but similar and just as permanent results have been obtained through other less dangerous and less expensive methods.

Can we say the X-Ray does no harm in these cases? I am inclined to believe that it causes a sclerosis of the spleen and bone-marrow and thereby gives a temporary relief only, with an aggra-

vation of symptoms later. Certainly this seems to have been so in my case and until we know more of the true action of the X-Ray on the tissue, I shall hesitate to advise its use.

I wish to thank Drs. Guthrie, Smyth and Hebert, of New Orleans; Dr. Bryant, of Bangor, Maine; Dr. Dunn, of Louisville, Ky; Dr. Brown of Decatur, Ill; Dr. J. H. Evans, of San Francisco; Dr. W. W. Harper, of Selma, Ala., and Dr. C. H. Weber, of Philadelphia, for valued and appreciated personal communications.

#### BIBLIOGRAPHY.

1. Churchill, *American Journal of the Medical Sciences*, October, '04.
2. Nichols, *American Medicine*, Vol. VI, 1903.
3. Cameron, *Am. Jl. Med. Sci.* 1888 and 1890.
4. Senn, N., *Medical Record*, April 25, 1903.
5. Stengel, *Text Book of Pathology*.
6. Dock, *Am. Jl. Med. Sci.*, Vol. CXXVII, 1904.
7. Osler, *Practice of Medicine*.
8. DaCosta, *Hæmatology*.
9. Hektoen-Reisman, *American Textbook of Pathology*.
10. Wilkinson, *Lancet*, Vol. I, 1903.
11. Lerch, *N. O. Medical and Surgical Journal*, Vol. LII, p. 22.
12. Smyth and Hebert, *Personal Communications*.
13. Simon, C. E., *American Jl. Med. Sci.*, Vol. CXXV, 1903.
14. Campbell, Colin, *British Med. Jl.*, Vol. I, 1894.
15. Heaton, *Lancet*, Vol. I, 1901.
16. Nammack, *Medical Record*, Vol. XLVIII, 1895.
17. Bryant and Crane, *Medical Record*, April, 1904.
18. Cabot, *Boston Med. and Surg. Jl.*, January, 1904.
19. Taylor, *Lancet*, Vol. II, 1894.
20. Simon and Campbell, *Medical News*, June 24, 1904.
21. Hare, H. A., *Medical News*, Vol. LXX, 1897.
22. Barton, *Therapeutic Gazette*, Vol IV, 1888.
23. Toulmin and Thayer, *Johns Hopkins Hosp. Bulletin*, Vol. II, 1891.
24. McCrea, *British Medical Journal*, Vol. I, 1900.
25. Bigger, W. G., *Lancet*, Vol. II, 1894.
26. DaCosta and Hershay, *Am. Jl. Med. Sci.*, Vol. XCVIII, 1889.
27. Evans, G. H., *American Medicine*, August 3, 1904.
28. Williams, *American Medicine*, Vol. VII, 1904.

Name of Observer	Blood Count Before X-Ray Was Used.	Duration of Treatment by X-Ray	Blood Count at Last Treatment.	Final Results And Present Condition	
				Present condition	not given.
1 Pusey, W. A. (Pusey and Caldwell on X-Rays.)	Red B. C. 3,000,000. White B. C. 300,000. Myelocytes in excess.	1 month.	No change.		
2 Senn, N. <b>Medical Record, August 22, 1903.</b>	R. B. C. 3,500,000. W. B. C. 64,800. Myelocytes not given. Feb. 3, 1903.	2½ months.	Normal. June 1, 1903.		Died, 1904.
3 Smyth and Hebert. (Personal Communications.)	R. B. C. 2,600,000. W. B. C. 3,500,000. Myelocytes present. Jan. 1903.	6 months.	R. B. C. 5,000,000. W. B. C. 280,000. Hemoglobin 61%.		Died, October, 1903.
4 Elliott and Guthrie.	R. B. C. 4,600,000. W. B. C. 169,000. Myelocytes 45%. July, 1903.	5 months.	R. B. C. 5,060,000. W. B. C. 68,000. Myelocytes 20%. December 1903.		Died, March, 1904.
5 Eastman, J. B. <b>(Denver Medical Times, Sept., 04.)</b>	R. B. C. 3,000,000. W. B. C. 169,000. W. B. C. 1,100,000. Myelocytes 11%. Jan. 1903.	6 months.	Blood normal. December, 1903.		September, 1904. Still in "good health."
6 Brown, E., Jr. <b>Journal A. M. A., March 26, 1904.</b>	R. B. C. 2,600,000. W. B. C. 800,000. Myelocytes 40%. July, 1903.	9½ months.	R. B. C. 5,700,000. W. B. C. 8,921. Myelocytes, none. Hemoglobin, 100%. May, 1904.		October 7, 1904. Spleen again much enlarged; white count 89,000. (Personal communication.)
7 Bryant and Crane. <b>(Medical Record, April, 1904.)</b>	R. B. C. 3,500,000. W. B. C. 176,000. Myelocytes in excess. September, 1903.	2 months.	Normal. No myelocytes. November, 1903.		October, 1904. Lost sight of case. (Personal communication.)
8 Taylor, W. J. <b>(Cincinnati Lancet-Clinic, May 14, 1904)</b>	R. B. C. 1,575,000. W. B. C. 147,000. Myelocytes. October, 03.	½ month.	R. B. C. Not given. W. B. C. 6,800. December 1903.		Died, December, 1903.
9 Evans, G. H. <b>(American Medicine, August 13, 1904.)</b>	R. B. C. 4,200,000. W. B. C. 147,000. Myelocytes 20%. October, 1903.	6 months. 129 exposures.	R. B. C. 3,680,000. W. B. C. 88,000. Myelocytes 21%. April, 1904.		September 29, 1904. W. B. C. 7,200. Myelocytes 15%. Growing progressively weaker. Rapid decrease in size of spleen. Taking arsenic since September 3, 1904. (Letter.)

Name of Observer	Blood Count Before X-Ray Was Used.	Duration of Treatment by X-Ray	Blood Count at Last Treatment.	Final Results And Present Condition
10 Evans, George H. (American Med., August 13, 1904.)	R. B. C. 2,450,000. W. B. C. 250,000. Myelocytes 38%. December 7, 1903.	4 months. 61 exposures.	R. B. C. 3,600,000. W. B. C. 12,600. Myelocytes 12%. March, 1904.	August 2, 1904. No treatment since February 20, 1904. W. B. C. 26,000; myelo. 22%. Spleen not palpable; color good. (Personal communication.)
11 Dunn, J. T. (American Pract. and News, July, 1904.)	R. B. C. 4,500,000. W. B. C. 128,000. Myelocytes 38%. December 17, 1903.	6 months.	R. B. C. 5,500,000. W. B. C. 37,000. Myelocytes 15%. July, 1904.	September 30, 1904. R. B. C. 5,184,000; W. 48,000. Myelocytes 20% Spleen enlarging. (Personal communication.)
12 Weber, C. H. (American Med., May 21, 1904.)	R. B. C. 2,306,000. W. B. C. 293,600. Myelocytes 40%. November 18, 1903.	3½ months.	R. B. C. 4,700,000. W. B. C. 7,200. Myelocytes, none. April, 1904.	October 10, 1904. W. B. C. 19,000. Ten myelocytes. Present general condition excellent. (Personal communication.)
13 Grosh and Stone. (Journal A. M. A., July 2, 1904.)	R. B. C. 2,464,000. W. B. C. 266,250. Myelo. 52%. February, 1904.	2 months.	R. B. C. 3,527,700. W. B. C. 11,480. Myelocytes 2%. April 10, 1904.	Died April 12, 1904.
14 Ahrens. (Munchs. Med. Wochens., July 4, 1904.)	Not given.	40 exposures.	Normal.	Died within six weeks after last treatment.
15 Cheney, W. F. August, 1904.	R. B. C. 2,500,000. W. B. C. 126,000. Myelocytes 45%.	144 exposures.	R. B. C. 4,000,000. W. B. C. 67,000. Myelocytes 25%.	Present condition not given.



## DISCUSSION.

DR. SMYTH stated that one case reported by Dr. Elliott he had treated with X-Ray, with apparently excellent results first, as the spleen was reduced one-third in size and the diarrhea and other symptoms subsided. The patient went to the mountains for the summer, where he contracted typhoid fever, and when he returned to the doctor's care, he had a return of all the old symptoms of leukemia aggravated. He tried the X-Ray on him again, but the patient got progressively weaker and died shortly afterwards. He is unable to say that the X-Ray was responsible for the slight improvement noted, as he had been taking arsenic and this might have something to do in the initial improvement.

DR. HEBERT stated that symptomatically, at least, the X-Ray had helped his patient, spoken of by Dr. Elliott, but that the blood always showed great excess in the number of leucocytes, these ranging from 15,000 to 100,000, with a large per cent of myelocytes. The patient had been kept alive in fairly good health for two years.

DR. WEIS stated he thought that as long as the genesis of the cell was not known, it was best to speak of a leukemia as being leucocytic or myelocytic. As regards the etiology of the disease he did not think that Dr. Elliott had laid enough stress on the infectious theory, those cases coming on suddenly and terminating in three or four days, certainly pointed to an infectious origin. He had seen a case in the Boston City Hospital very acute in its onset and where there were 250,000 white blood cells. Speaking of the pathology of the conditions he stated that there is always a hyperplasia of the lymph nodes causing the diarrhea, and which is the cause of the enlarged tonsils and adenoids seen in the disease. Infection has been supposed to be through the tonsils. Hemorrhage is often a feature and he thought it a dangerous practice to puncture the spleen in these cases. He had had no experience with X-Ray nor with the bone-marrow. He mentioned the fact that a sudden drop is always noted in the white cells during an acute intercurrent disease and he likened it to the action of Coley's treatment of cancer.

DR. GRANER wanted to know if there were any gastric disturbances from the administration of such large doses of arsenic?

DR. MILLER wished to know if there were any statistics as to the percentage of these cases which have gastric hemorrhage?

DR. WEIS stated that in one case he had seen paralysis had

existed, and at the post-mortem, instead of a hemorrhage of the spinal cord, a lymphoma had been found.

DR. ELLIOTT, JR., in closing, in answer to Dr. Graner's question, said that he had seen no gastric disturbance from the administration of the arsenic in his case. He did not know of any statistics of the occurrence of gastric hemorrhage in leukemia, but he had seen one reported case of fatal haematemesis. He spoke of the frequency with which this disease existed where it was not suspected, and where the true condition was realized only after a blood examination. He did not approve of the X-Ray, and he did not expect to use it again. Although the symptoms may improve under X-Ray treatment, the spleen may be diminishing in size, the condition of the blood may be improving, the patient always grows progressively weaker. He mentioned the frequency with which hemorrhage into the spinal cord and brain occurred.

#### REPORT OF CASES.

DR. JOACHIM *demonstrated a tracheal tube*, of which the lower end of the outer canula was corroded and missing. The tube was obtained from a boy who had been tracheotomized about a year ago for the relief of urgent dyspnea, due to a diffuse papilloma of the larynx, which obstructed and occupied its lumen. The papilloma was removed by a subsequent laryngotomy, but showed intense recurrency. Subsequent local treatment permitted the boy to return home during the summer, with instructions to wear the canula, how to care for it, and to return in the autumn. When he returned the inner tube protruded one-half of its length, and when pushed would at once spring back, while the outer tube was apparently in proper position, showing, however, extreme lack of care. Inquiry showed that it had never been out of the opening since he had left the hospital. Preparing for whatever might be indicated, we removed the outer tube and found it in the present condition. A cushion of granulation below the corrosion accounted for the springing out of the inner tube. In the attempt to find the other portion we used without success tracheoscopy, probing and repeated X-Ray examination. The boy developed a septic consolidation of the right lung, with a typical fever curve. This condition subsided in the last few days, since which the boy is free of fever. Tubercle bacilli were never present. He has returned to the country in a much improved condition. The tube is of the usual commercial

variety, made of silver, and I am unable to account for the corrosion. Another tube of the same make has been substituted. The former is now under examination to determine the reason for the corrosion.

DR. ASHER, discussing above case, stated that probably the absorption had been due to electrolytic action.

DR. JACOBY, on the request of Dr. Parham, who was absent, exhibited a specimen of ileo-cecal intussusception, which was removed from a man about 54 years of age by Dr Parham. A Murphy button had been used to joint the ileum and colon after the operation.

# N. O. Medical and Surgical Journal

---

## Editorial Department.

---

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D

---

### Medical Standards.

Much interest has always been attached to the steady efforts at the elevation of medical standards during the past few years. First of all, a few separate states devised and promulgated laws directed at correcting the flagrant abuses of the physician's title; these were followed in rather rapid succession by other States until enough were provided with statutory enactments to allow some comparison of the effectiveness of these.

The reflex has been very remarkable. Not only have the most of States been honest in the administration of these laws, but the educational standard has been so raised that everywhere medical colleges have increased their requirements to meet the conditions.

The pendulum has begun to swing the other way, however, and the horde of medical graduates each year has compelled at least an expression of the ideas of those who would qualify the existing provisions. Reciprocity between States having comparatively the same laws is urged, and even a more liberal attitude toward the medical student himself has been urged in some quarters. The highest schedule of medical proficiency provides for a thorough training in not only clinical but laboratory and special methods, and those colleges which maintain the argument that only the intellectual man should qualify in the profession tend to make the road even harder than it has been. As a matter of actual fact, the medical profession itself is beginning to take the matter seriously and the A. M. A. has gradually elevated the requirements leading to privileges of membership so that now a man must have both an educational as well as a moral and social qualification.

At all times since medicine and surgery have outgrown their cruder antecedents, there have been exceptional minds who have exemplified the superiority of the intellectual over gross intelli-



gence, but the rank and file of the medical profession has been recruited from the ignorant classes, and both the morale and the standards have suffered. In almost every argument which considers modern methods of medical education there is a straw of evidence adduced which considers how large a percentage of medical graduates either drop out of practice altogether or else pervert their training to either baser or mediocre employments. Again, tables are drawn showing how ill-paid most physicians are.

The law of political economy is that of natural selection, and the fittest are bound to survive. No denial is ever forthcoming affecting the natural success of the well-trained men.

The growth of public knowledge carries along an appreciation of the fitness of the skilled workman either in the arts or sciences, and the demand grows more and more for the individual who is able the most to satisfy a higher intelligence of need.

That our standards of medical qualification in the United States have grown with the enlargement of this idea is evident on every hand. The restriction of the practice of medicine to men qualified has resulted in a decade in establishing a standard of excellence in medical research and in methods of practice which today invite comparison with the older schools of Europe. Our larger cities are centers of brilliant medical and surgical achievement, affording an open arena to all the world, which not many years ago smiled at the crudity of American methods and American pretense.

Even the layman sees the advance, and, although he is daily invited to a survey of a host of flagrant and pretentious notices of cure-alls in the daily press, any one may read that in their very bold and brazen claims, these parasites must eventually die a natural death.

The force of intelligence, both in and out of the profession, points to a recognition of the need of even higher standards, and even if few doctors meet in the field of hippocratic practice, those who do will be filled with academic spirit, which is higher than commercialism and not wholly without its own reward.

---

### **The Orleans Parish Medical Society.**

The metropolitan medical organization begins the new year under most favorable auspices. Housed in a home of its own, well adapted to its purposes, which is located in a relatively central while

very accessible part of the city, it is prosperous financially, alert mentally, industrious scientifically, and virile in every way.

Great interest was manifested at its recent annual meeting, the occasion of the election of officers for 1905, a list of whom is published in our "News Items."

All offices but that of president were contested for enthusiastically and stubbornly, but with great good humor. There were numerous neck and neck races, with very close finishes, yet most elections were finally made unanimous, and there seemed to be general satisfaction.

The presidency was not the subject of rivalry, because while there are many men in the society able to fill it creditably, it was conceded that there was one man who deserved it this time, and who is able to fill it, too, so it was given to him.

Great things may be expected of O. P. S. this year, and we are confident some of them will be done.

The library has been largely increased both by donations and purchases.

Several members were elected at the meeting referred to above, and that is not surprising for no reputable medical man alive to the welfare and progress of his profession can afford to stay out.

---

## Abstracts, Extracts and Miscellany.

---

### Department of Obstetrics and Gynecology.

---

In charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER, New Orleans

---

OPERATION FOR CARCINOMA UTERI IN GERMANY.—Prof. Ols-hausen, of Berlin, read a paper on this subject before the British Medical Association in July, 1904, in which he stated that those in favor of extensive abdominal operations for cancer were numerous in Germany and Austria, although himself and a few others favored the vaginal operations. Mackenrodt removes all glands within reach, since it was impossible to know which were affected. Glandular affection was usually late. It was impossible during

operation to recognize infection of glands, for small ones were sometimes infected, while enlarged ones were not.

The removal of glands must involve the removal of surrounding connective tissue, but operations like those which were carried out on the breast were quite impossible in this region. These operations on cases in which the growth extended beyond the uterus had a high mortality, and injuries to the urinary tract were very common, amounting to 39 per cent. He performed vaginal hysterectomy in 61 per cent of the cases which came under his care. Up to 1903 he had operated on 671 cases, with a mortality of 6 per cent. Since then he had operated on 137 cases, with 6 deaths, or a mortality of nearly  $4\frac{1}{2}$  per cent.

The statistics of 500 cases showed that at the end of two years after operation 78 per cent were living; at the end of five years 30 per cent. Showing that more cases died between the end of the second and the end of the fifth year after operation than in the first two years. He held that the extensive abdominal operations lately advocated were not justified by the results, and thought that vaginal hysterectomy was the best surgical treatment for uterine cancer.—*Medical Record*, August, 1904.

THE ULTIMATE RESULTS OF INDUCED LABOR FOR MINOR DEGREES OF PELVIC CONTRACTION.—Dr. Richard C. Norris recently discussed this subject before the Obstetrical Society of Philadelphia and reported in detail 30 cases, with their results for mother and child, the degrees of contraction varying in the conjugate diameters between 8 and 10 *c. m.* There was neither maternal mortality nor morbidity. The infant mortality was 10 per cent, after following the histories of the children subsequent to their leaving the hospital. Dr. Norris took issue with those who recommend hasty Cesarean section for these grades of deformity. He quoted Williams' statement that hardly more than 50 per cent of the infants survive the first few months of life, and said that the statement could only be true of induced labors for high grades of contraction, a field no longer to be tested by induced labor, but by elective Cesarean section.

He also referred to Reynolds' statement that Cesarean section is indicated when, with any definite pelvic contraction, there is a history of repeated child-births during previous operative labors and for healthy primiparæ with conjugates between 3 and 4 inches,

that the amount of difficulty which will occur should be estimated by observations of the progress of labor; but that the possibility that an indication for the Cesarean section may arise should always be borne in mind in such a case, and that all preparations for it should be made beforehand, or at least during the first stage of labor. Norris referred to his tables and asserted that it was in just such cases that his best results were obtained by induction of labor, not more than four weeks and usually two weeks before term. The assistance given nature by skillful induced labor and the employment of the Trendelenburg-Walcher position had repeatedly avoided the necessity for a difficult operative delivery, which ordinarily gives the high foetal mortality. He discussed the difficulties of accurate estimation of the duration of pregnancy, and outlined the plan followed to eliminate as far as possible the induction of labor at too early or too late a period of pregnancy. An analysis of his tables of 30 cases was presented and a plea made for the adoption of this method of treatment in place of the hasty and oftentimes spectacular Cesarean section, which, in his judgment, has sometimes been an exhibition of experimental and unnecessary surgery.—(*Transactions of the Obstetrical Society of Philadelphia.*)

**METRRORRHAGIA IN A GIRL AGED FOURTEEN YEARS.**—W. K. Walls (*Jour. Obst. and Gyn. Br. Emp.*), reports a case of severe metrorrhagia in a girl of fourteen years.

Examination showed the cervix uteri to be rather large, flabby and the uterus anteflexed. Curettage was performed and the scrapings were examined. The scrapings showed a great amount of interglandular, small-celled infiltration. The glands were, for the most part, small, but here and there were seen one or two of unusually large lumen. There was no great increase of vessels.

There was no history of hemophilia in the family. These conditions, believes the writer, point to some amount of agreement with those found by Dr. Donald in a case of persistent menorrhagia in an adult and which he was inclined to regard as one of "idiopathic endometritis."



## Department of General Medicine.

In charge of DR. E. M. DUPAQUIER, New Orleans.

THE OXYTOCIC ACTION OF SUGAR.—It promotes uterine contractions, but it becomes active only after the os has begun to dilate, when the parturient's supply of glycogen has already been spent.

Very small doses give the best results, viz.: 25 grammes in a tumbler half full of water or milk to be taken in three portions at half-hour intervals. Repeating this small dose is better than giving an initial dose of larger size. From 10 to 30 minutes after ingestion, it begins to act, one more point in its favor, since both absorption and action of other oxytocics are slow. Rapid action is still increased when labor has advanced or dragged for the glycogenic reserves are still more completely exhausted. Action is void during the third stage, also *post-partum* regarding involution and diuresis. As to lactation, it is slight, yet marked.

It is not a *drug* like ergot or quinin; it is not *toxic*, a point of importance, considering that, under the circumstances, metabolism is lacking. It does not promote post-partum hemorrhage or abortion, since it never acts unless labor is under way. It does not affect the foetus. Special reference is made to its general action on all muscular structures.

Thus, it is a handy oxytocic, and at the same time a true stimulant, a tonic increasing the muscular energy of the parturient, assisting in the expulsion of the foetus; for all these reasons it is better than ergot, quinin or warm water.—(Dr. Keim, *Arch. gen. de Med. Journ. de Med. et de Chir. pratiques*, November 10, 1904.)

## Department of Therapeutics.

In Charge of DR. J. A. STORCK, New Orleans.

NERVOUS INSOMNIA AND MORPHINISM CURED BY DIONIN AND VERONAL.—An interesting case is reported in the *Jour. Méd. de Bruxelles*, 1904, No. 12.

The patient was a lady fifty years of age, of strong constitution,

but suffering with obstinate nervous insomnia and addicted to the use of morphin, which latter had been prescribed to combat the insomnia. The insomnia she suffered with from the earliest age; the slightest emotion, either joyful or sad, would drive her sleep away. In 1896 the patient began to show symptoms of nephritis, and with the advent of this disease the insomnia became aggravated. She was given the bromides, sulfonal, trional, chloral hydrate, codeine and Dover's powder, with unsatisfactory results. Some hypnotics acted fairly well for a week, and then lost their action; others failed to produce sleep at all, while chloral deranged the patient's stomach after a few doses. It was then that her physician prescribed morphin in small doses, and she gradually got so used to it that she could not do without it, and even that finally failed to produce sleep. The author decided to subject the patient to treatment with dionin and veronal, and in about three months obtained a practical cure.

The author draws the following conclusions from this case:

1. In morphinists who have not been used to consume more than 1-3 grn. of morphin per day, dionin can be substituted from the beginning without appreciable symptoms of withdrawal.

2. In equivalent doses the soporific action of dionin is inferior to that of morphin, but it has a great advantage over the latter in, that it possesses a special sedative quieting action; this property is particularly useful in nervous persons, in hysterics and neurasthenia. It is to this continuous sedative action, during a period of three months, that the author ascribes his success in curing such an inveterate case of insomnia.

3. The digestive, intestinal and renal functions are in no way affected by the prolonged use of dionin.

4. In spite of the length of the treatment, no sign of habituation has been noticed.

5. Veronal is a very energetic hypnotic. It seems to exert a stimulant action on the digestive functions, and does not affect the intestinal and renal functions. The combination of dionin with veronal has shown itself very efficacious and is to be particularly recommended for nervous patients.

[We have found Veronal very effective in cases of morphinism.]

—*Merck's Archives.*

MESOTAN IN NIGHT SWEATS.—Dr. Strass, of Vienna, obtained good results with mesotan in the treatment of night sweats in con-

sumptives. A few drops are rubbed into the back and chest before going to bed.—*Therap. Monatsh.*

GONORRHEA IN WOMEN—TREATMENT WITH YEAST.—As a result of chemical and bacteriological investigations, Abraham (*Boston Medical and Surgical Journal*, March 24, 1904) concludes that yeast can kill gonococci. The action is chemical. Sterile yeast has this bactericidal action only when sugar is added. Living yeast acts by itself, it is true, but its activity is increased by the presence of asparagin.

For ease of application by the patient, and to keep the yeast cells alive, the yeast and asparagin is made with gelatin into vaginal suppositories. Such suppositories cause no disagreeable symptoms, and give good results in the treatment of gonorrheal diseases of the vulva, vagina and uterus.

The suppositories affected gonorrheal salpingitis favorably only by preventing repeated infection of the tubes from the uterus.

—*The Therapeutic Gazette.*

ACUTE TETANUS CURED BY INTRANEURAL INJECTIONS OF ANTITOXIN.—After reporting two cases of tetanus cured in this manner, Rogers states in the *Medical Record* of July 2, 1904, that his experience demonstrates without a shadow of doubt the efficiency in tetanus of injections of antitoxin into the substance of the motor nerves of the part of the body primarily infected and into the spinal cord. From the wonderful and rapid change for the better noted after injecting the antitoxin into the dorsal cord, in one seemingly hopeless case, it might be urged that the motor nerves could be neglected, but in view of the experiments by Meyer and Ransom, this would seem unsafe. The exposure of the nerves in the axilla or high up in the thigh is simple and adds nothing to the gravity of the situation, and in the two cases under the writer's care really seemed very advantageous. What he terms his inexcusable neglect to inoculate the obturator nerve in one case he is convinced led to an increase of the symptoms. That they were checked by injecting the dorsal cord only goes to show the necessity of producing a wound of nervous tissue to secure entrance of the antitoxin. This, by the way, is evidently the crux of the whole problem, and seems a beautiful confirmation of a physiological fact, or perhaps theory, which is as remarkable as it is unique, namely, the complete isolation of at least some nerve cells from the circulating blood. The

tetanus toxin and the antitoxin can only reach these nerve cells through nervous tissue, and normally this course begins with the terminal filaments of the axis cylinders.—*The Therapeutic Gazette*.

---

## Department of Ophthalmology.

---

In Charge of Drs. Bruns and Robin, New Orleans.

---

WOOD ALCOHOL POISONING.—In the October 22, 1904, number of the *Journal of the American Medical Association* (*Journal* October 1, 8, 15, 22, 29) Dr. Casey Wood, of Chicago, and Dr. Frank Bullin, of Montreal, conclude a highly interesting paper on this subject. "The list of previously unrecorded cases of blindness, so far as Dr. Wood has been able to collect them, includes 89 well authenticated cases from the drinking of methylated liquids. Absorption of the fumes is responsible for ten instances of amblyopia, while the deaths (without history of previous blindness) number 82. Altogether, then, we have 153 instances and at least 122 cases of death from methyl alcoholic poisoning in the last few years—275 in all."

The authors go on to say that they conjecture that the number since the introduction of Columbian Spirits must be about 400. They point to the great increase of danger that has followed the introduction of the deodorized product under the various names of "Columbian," "Colonial," "Union," etc., spirits. This purified form is used not only for burning and for preparing varnishes, but now enters largely into the composition of "essencés," "bitters," "extracts," "liniments," "bay rums," "colognes," and, indeed, all sorts of nostrums and concoctions, in whose preparation alcohol is employed. Drs. Bullin and Wood have reached the conclusion that the use of this poison for any purpose, by which it may be taken into the stomach or inhaled as vapor (burning, domestic cleaning, frictions after bathing), is dangerous, as the individual susceptibility to its action varies greatly. They believe that the only efficient means of preventing the horrible consequences entailed by the use of this spirit will be to follow the example of foreign countries and compel the addition to it of naphthalin or some other pungent



ingredient as to render it nauseous in the extreme. "Deodorized wood alcohol has no legitimate place in commerce. Its mere existence must always be a menace to the lives and eyesight of the community. The symptoms of methyl alcohol poisoning may vary from a mild intoxication, with perhaps some giddiness, nausea and mild gastro-intestinal disturbance, terminating in recovery, but occasionally followed by more or less serious damage to vision; to an effect more pronounced in every way; nausea, dizziness, vomiting and gastro-enteritis being conspicuous, the dimness of vision increasing to total blindness; or even to an overwhelming prostration, which terminates in coma and death. Headache, muscular weakness, with depression of the heart's action, sweating and dilatation of the pupils are symptoms naturally to be expected. Recovery rarely happens if the patient once becomes comatose. After a time the vision may improve greatly, but a relapse is almost certain to occur and terminate in complete or almost complete blindness.

"The treatment of methyl alcohol intoxication consists chiefly in getting rid of the poison from the stomach and intestines by means of the stomach-pump and rectal injections; stimulants, especially ethyl alcohol, strychnia and coffee; heat to the body and extremities. The treatment of the amaurosis is unsatisfactory. In the early stages, pilocarpin and potassium iodide; later, strychnia hypodermically and by the mouth."

This whole paper is worth reading carefully, especially as not a few obscure cases occur due to the habit of "nipping" from the varnish can, the cologne, Florida water or bay rum bottle, or lemon, ginger, peppermint and other essences, bitters or the ordinary flask of cheap, impure whisky.

---

## Department of Nervous and Mental Diseases.

---

In charge of DR. P. E. ARCHINARD and DR. ROY M. VAN WART,  
New Orleans.

---

THE PATHOLOGICAL ANATOMY OF ACUTE INFANTILE POLIOMYELITIS. Prætorius (*Jahrbuch für Kinderheilkunde*, Bd. 8, S. 175) describes the pathological changes in three cases which he had the

opportunity to examine. In the first case the child died when nine months old, some three months after the onset of the disease, which had produced paralysis of the left leg.

On microscopical examination there was destruction of the gray matter of the anterior horn of the left side in the lower lumbar and sacral segments of the spinal cord. The branches of the central artery were surrounded by numerous granules and round cells. At the seat of the lesion the gray matter of the anterior horns was loaded with granules and round cells.

The antero-lateral tracts of the spinal cord contained many degenerate fibres. The posterior horns and posterior columns were normal, though the column of Clark was involved in one case.

The writer concludes that the pathological conditions found in these cases was undoubtedly due to a myelitis of vascular origin and affected that portion of the gray matter which was supplied by the central artery of the spinal cord.

PERIPHERAL NERVE PARALYSIS AND PLEXUS PARALYSIS IN THE UPPER EXTREMITY. Bruns (*Neurol. Centralbl.*, Nov. 16, 1902) has analyzed 133 cases with regard to prognosis. From these he has selected 70 cases on which to base statistics. Of these 47 were peripheral paralysis, all but 8 (7 peroneal and 1 sciatic) involving individual nerves of the upper extremity. In the remaining 23 cases the paralysis was dependent on a lesion of the brachial plexus. In all of the cases analyzed the paralysis was due to trauma, using the word trauma in its widest application. Cases where a nerve was completely divided are not included. All were treated with electricity for a considerable period. The exact etiology of the 70 cases is given in tabular form. Of the 47 cases of peripheral nerve paralysis, 31 (66 per cent) recovered; while of the 23 brachial plexus palsies, recovery only took place in 6 (26 per cent). The large percentage of recoveries in musculo-spiral paralysis, 19 of 22 cases (87 per cent), is striking. In only one of the 4 serratus magnus cases did the paralysis disappear. Of 7 cases of obstetrical plexus paralysis, in not one did recovery take place. The author points out that in his experience the prognosis in a case of traumatic peripheral nerve palsy is two and a half times as favorable as it is in the case of a plexus paralysis.

The explanation of this difference is difficult to find. Bruns suggests that the cord or the nerve roots in close relation to the cord may be damaged more frequently than has been supposed. It still

remains to be shown, however, why brachial plexus lesions should occupy a place as regards prognosis midway between the peripheral nerve lesions where the outlook is generally favorable and lesions of the spinal cord where it is unfavorable.

[The frequency with which brachial plexus paralysis are seen renders the question of prognosis of great importance. This analysis presents in a striking manner the necessity for a guarded opinion in these cases.]

**DIFFERENTIAL DIAGNOSIS OF NEURITIS.** Oppenheim (*Jour. f. Psych. und Neurol*, Bd. I, 1902) has found that a diagnosis of neuritis is often erroneously made in cases with pains which are really of hysterical or neurasthenic origin, and that this error has had a very unfavorable effect on the course of such cases. In almost all those cases in which neuritis has been wrongly diagnosed, the only objective symptom has been tenderness of the nerves on pressure. From the examination of a large number of cases of hysteria, neurasthenia and hysteroneurasthenia he has come to the conclusion that the mechanical excitability of the sensory nerves is increased in neuropathic individuals apart from any inflammatory changes in the nerves.

He examined 180 cases from this point of view—confining his attention mainly to the nerves of the arms—and found that 36 of these exhibited undue susceptibility to pressure on the nerves, as indicated either by localized pain at the point of pressure, or, much less often, by paresthesia, radiating along the nerve tract. This undue susceptibility of the sensory nerves is not always general, but may be confined to certain nerves.

He, therefore, concludes that tenderness of the nerves on pressure cannot be considered as sufficient datum to found a diagnosis of neuritis on.

---

## Miscellaneous.

---

REFERRING TO HIGH-FREQUENCY APPLICATIONS AS A REMEDY FOR X-RAY BURNS, S. J. Stewart, of New Orleans, writes us:

“Readers of this JOURNAL who are working with the X-Rays may be interested in the following experience of my own:

“Some time ago while testing a lot of tubes, my hands began to

show the characteristic effect of prolonged exposure. The skin became red and inflamed, and in a condition resembling a severe sunburn. Out of a spirit of curiosity, I made an application of electricity obtained by passing the disruptive discharge from a static condenser through the primary of a Tesla coil, the secondary discharge from this coil was applied by means of a glass electrode directly to the back of hands and arms, with the immediate result of relieving the burning sensation and causing in a few days a disappearance of the redness. Since then I have several times exposed my hands to just as severe an ordeal, but take the precaution to make the high-frequency application afterward, and have not suffered the slightest inconvenience.

"Just here, as an electrician, I wish to emphasize the fact, that currents of high-frequency and high potential can only be obtained in this way, or by using a Oudin resonator as a step-up transformer. The method sometimes employed of grounding one pole of a static machine and connecting a vacuum electrode to the other and separating the discharge rods about  $\frac{1}{2}$  inch, can only give an interrupted static discharge of an electro motive force no higher than the potential necessary to overcome the resistance of  $\frac{1}{2}$  inch of air. This current can in no sense be termed a high-frequency current, and its potential cannot be considered as any higher than that of the machine generating it."

ACTION OF DIGITALIS ON BLOOD PRESSURE.—Gennari states that the increased blood pressure is a compensating phenomenon to counteract the great increase in the venous pressure. When the left ventricle becomes too weak to increase its pressure, and the blood pressure consequently is lowered, the prognosis is unfavorable. Digitalis, by inducing diuresis and thus reducing the resistance and the congestion, is able to reduce the blood pressure to normal. *Réforma Medica-Jour. A. M. A.*



## Louisiana State Medical Society Notes.

---

In charge of DR. P. L. THIBAUT, Secretary, 141 Elk Place.

---

**OFFICERS**—President, Dr. Charles Chassignac, New Orleans; 1st Vice President, Dr. Oscar Dowling, Shreveport; 2nd Vice President, Dr. L. C. Tarleton, Marksville; 3rd Vice President, Dr. J. F. Buquoi, Colomb; Secretary, Dr. P. L. Thibaut, New Orleans; Treasurer, Dr. M. H. McGuire, New Orleans.

**COUNCILLORS**—Drs. A. G. Friedrichs, Chairman, 2nd Cong. Dist., 641 St. Charles St., New Orleans; J. J. Ayo, Sec'y., 3rd Cong. Dist., Bowie; P. E. Archinard, 1st Cong. Dist., New Orleans; S. L. Williams, 5th Cong. Dist., Oak Ridge; N. K. Vance, 4th Cong. Dist., Shreveport; C. M. Sitman, 6th Cong. Dist., Greensburg; C. A. Gardiner, 7th Cong. Dist., Sunset.

---

WITH THE BEGINNING OF THE NEW YEAR, the President deems it timely and proper to remind the members of the advisability of commencing active work in preparation for the next annual meeting.

Chairman should call their committees together. Writers should be at their papers. Officers of component societies would do well to redouble their efforts for securing new members.

Members of the council might increase their activity in trying to organize their respective districts.

The first step is the most difficult. Start at once. Everybody get busy.

THE REGULAR QUARTERLY MEETING OF THE ST. JAMES PARISH MEDICAL SOCIETY was held at Convent, on Dec. 1, with the following members present: Drs. P. C. Tircuit, B. A. Colomb, Numa Himel, J. E. Doussan, B. Winchester, G. Gaudet and J. F. Buquoi. Dr. Colomb read a paper entitled "Contract Medical Practice." Dr. L. S. Gaudet, of St. James P. O., was elected a member. Following officers were elected to serve during the ensuing year: President, Dr. B. Winchester, of Colomb; vice-president, Dr. Numa Himel, of Welcome; secretary-treasurer, Dr. Gaston Gaudet, of Paulina. A special meeting was called for December 14, to vote on a resolution abolishing "Contract Practice" in St. James Parish.

## Medical News Items.

---

AT THE MEETING OF THE ORLEANS PARISH MEDICAL SOCIETY, held December 10, 1904, the following officers were elected to serve during the ensuing year: President, Dr. Louis G. LeBeuf; first vice-president, Dr. J. A. Storck; second vice-president, Dr. J. F. Oechsner; third vice-president, Dr. S. M. D. Clark; secretary, Dr. Allain Eustis; treasurer, Dr. Jules Lazard; librarian, Dr. Homer Dupuy; additional members board of directors, Drs. M. J. Magruder, Gordon King, and J. G. Dempsey.

THE AMERICAN PUBLIC HEALTH ASSOCIATION WILL MEET at Havana, Cuba, beginning January 9 and will continue for five days.

The headquarters of the Executive Committee will be at the Hotel Inglaterra, which will be also the headquarters of the Association.

No exceptional excursion rates have been arranged because of the small number of persons expected from the United States.

Hotel rates vary from \$2 to \$5 a day, according to the hotel. The Inglaterra, Passage and Telegrafo being the best and highest.

The meetings of the Association and Laboratory Section will be held at the Academy of Medical Sciences, the Laboratories of the Medical Department of the University of Havana and at the Marti Theatre. Excursions have been planned by the Committee on Arrangements to a sugar plantation; to the Mariel Quarantine Station; to the Immigrant detention camp; Penitentiary and Hospitals.

The meetings of the Association are open to the public.

An interesting program is promised dealing with water supplies, disposal of sewerage, infectious diseases, tenement houses, dress hygiene, etc. The easy access of the place of meeting should direct a large delegation from New Orleans and we understand that already a number of our medical men have indicated their intention of going.

THE PANAMA CANAL COMMISSION announces an examination on January 18, 1905, to be held at place or places to be announced.

Applicants for any of the places named should address the United States Civil Service Commission at Washington, D. C., for forms and information.

Vacancies are to be filled in the positions of Surgeon, salary \$250 per month; physician, salary \$150 to \$250 per month; pharmacist, \$900 to 1200 per annum; hospital interne (male), \$50 first year, \$125 the subsequent years, per month; trained nurse (male or female), \$50 per month. Each of these offices provides additionally board and quarters.

THE AMERICAN JOURNAL OF NURSING presents a very pretty cover for its Christmas number. Several excellent articles of particular interest to nurses and some of general interest are to be found in this particular copy. The *Journal of Nursing* has made and now occupies a leading place among the periodicals devoted to nursing interests.

PERSONALS: Dr. M. F. Smith is the new State physician for Shreveport, La.

Dr. Clarence Pierson, of Alexandria, has been appointed Superintendent of the new Insane Asylum, at Pineville.

Dr. W. L. Dickerson, of Shreveport, was in New Orleans recently.

Dr. J. A. O'Hara, who resigned as Inspector of Communicable Diseases of the City Board of Health, when he was elected coroner, has been succeeded by Dr. C. W. Groetsch.

Dr. Fred R. Jones has moved from Victoria to Alexandria to practice his profession.

Dr. Randell Hunt was elected Surgeon-in-Chief and Superintendent of the Shreveport Charity Hospital recently.

Drs. Chas. Chassaignac and Isadore Dyer have gone to the Pan-American Medical Congress.

Drs. Quitman Kohnke and P. Michinard will attend the Havana meeting of the American Public Health Association.

Dr. J. C. Chapman has moved from Antioch to Skidder, La., and will practice his profession there.

Dr. H. A. King has been elected to the Presidency of the New Iberia Board of Health for the coming year.

MARRIED: Dr. Louis Danos and Miss Annie Comeaux, at Plaquemine, La., on December 7.

Dr. E. J. Huhner was married on November 30 to Miss Marie Emma Villars.

THE ST. JAMES PARISH MEDICAL SOCIETY held its regular quarterly meeting at Convent, December 1. Dr. B. A. Colomb read an interesting paper on "Contract Practice." The following officers were elected: Dr. B. Winchester, president; Dr. Numa Himel, vice-president and Dr. G. Gaudet, secretary and treasurer.

THE HAHNEMANN MEDICAL COLLEGE and the Chicago Homeopathic College have been consolidated, with Dr. George F. Shears as president.

THE CRESCENT CITY JOCKEY CLUB will give the gross receipts of January 3 to the Charity Hospital, Touro Infirmary and the Charity Hospital of Shreveport. One-half of the amount will go to the New Orleans Charity Hospital, one-fourth to the Touro Infirmary and one-fourth to the Shreveport Charity Hospital.

THE POLICE JURY OF CADDO PARISH voted \$520 to purchase an X-Ray outfit for the Charity Hospital of Shreveport.

AT A SPECIAL MEETING OF THE ST. JAMES PARISH MEDICAL SOCIETY held at Convent, December 14, a resolution to abolish contract medical practice was defeated.

THE MONROE HOSPITAL TREATED 111 PATIENTS LAST YEAR. A movement is being made by the ladies of Monroe to enlarge the usefulness of the institution.

THE CHARITY HOSPITAL TRAINING SCHOOL FOR NURSES held its graduation exercises, December 14. The address was delivered by Mr. Hunter C. Leake. Dr. Ernest Lewis, Vice-President of the Charity Hospital, delivered the diplomas with a few appropriate remarks. There were 22 graduates in all, including one Sister of Charity. The Charity Hospital Training School is now on a successful basis, as the above would indicate, and much credit is due to the staff of teachers and the Directress, Sister Agnes, who is the head of this department of the institution.



## Book Reviews and Notices.

---

*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

---

*A Manual of Clinical Diagnosis by Means of Microscopical and Chemical Methods*, by CHARLES E. SIMON, M. D. Fifth edition; thoroughly revised and enlarged. Lea Brothers & Co., Philadelphia and New York, 1904.

Exact methods of diagnosis, with their latest development, are simply and clearly exposed. The chapter on the blood, on the technique of its examination, have been almost entirely rewritten. The subject of leucocytosis has been rearranged in such a manner that hyper and hypoleucocytosis are separately considered in connection with the different varieties of leucocytes. A new section deals with the kryoscopic examination of the blood. Additions have been made in the chapters on the bacteriology and parasitology of the blood, on the feces, sputum, urine, transudates and exudates. The number of illustrations have been enlarged and six new colored plates, representing haemin crystals, elements of normal blood, poikilocytosis, changes in red cells, lymphocytes, granulocytes and urinary casts are more nearly true to nature than any that have hitherto been prepared. The publishers present to the laboratory student, undergraduate and practitioner an admirable book. STORCK.

---

*Medical Diagnosis; Special Diagnosis of Internal Medicine. A Handbook for Physicians and Students*, by Dr. WILHEM V. LEUBE, translated from the 6th German edition, edited with annotations by JULIUS L. SALINGER, M. D. D. Appleton & Co., New York and London, 1904.

The diagnosis of Leube is a plain, practical work which describes disease and the various differential points in a lucid manner. The main features of this text-book consist in the explicit differential diagnoses. The work has been brought thoroughly up to date, but it has been necessary to add some few descriptions, etc.; these have been inclosed in brackets so as to distinguish them from the original text.

The editor and publishers deserve praise for presenting to the English-reading profession the advantages of this storehouse of bedside knowledge. STORCK.

---

*The Practical Medicine Series of Year-Books*, edited by GUSTAVUS P. HEAD, M. D. Vol. X, *Skin and Venereal Diseases—Nervous and Mental Diseases*, Edited by W. L. BAUM, M. D., and HUGH T. PATRICK, M. D. The Year-Book Publishers, Chicago, 1904.

The series of year books has come to stay. They carry an excellent review of the branches presented and so carefully prepared that both for authority and practical use they are always of service. The book in hand shows the usual attention to detail in the review of the literature covering the branches named in the title. DYER.

*International Clinics.* Vol. III, 14th Series. J. B. Lippincott Co., Philadelphia, 1904.

An excellent array of articles on syphilis opens this volume of the Clinics. It presents superb illustrative plates of the eruptions of the disease, and in the collateral text there are articles dealing with the modern ideas of theory and treatment. A number of other articles, besides, are presented on tuberculosis, indigestion, gynecology and nervous affections, all of them up to the usual standard. The variety of topics makes the volume of unusual interest, while the eminence of the contributors must make this particular volume valuable.

DYER.

*The Principles and Practice of Gynecology.* For Students and Practitioners. By E. C. Dudley, A. M., M. D., President of the American Gynecology Society, Professor of Gynecology Northwestern University Medical School, Gynecologist to St. Luke's and Wesley Hospitals, Chicago. Fourth Edition, Revised, pp. 771, 419 illustrations in color and monochrome. Lea Brothers & Co., Philadelphia and New York, 1904.

Dr. Dudley's book has been a standard text, both among students and practitioners, since the first edition was presented to the profession. The simple announcement that a new edition has been issued is enough to secure the work the same respect and preference that was shown the former editions. Throughout the text can be seen the evidences of thorough revision and the substitution of new and original illustrations. Various chapters have been, to a great extent, rewritten.

The author has divided the subjects, not in the usual manner of grouping in each part all the diverse diseases of some special organ, but so far as practicable he has arranged them in pathological and etiological sequence.

By this classification, more pathological than regional, the student will be able to better comprehend the sequel and significance of the pathological processes.

To this advantageous arrangement is added an unusually instructive list of illustrations, especially of operative technic, almost all of which are original and prepared for this edition.

Another point of distinct value is the arrangement in tables and parallel columns of the etiology, symptoms, diagnosis and differential signs, instead of running such matter together in the general text.

Dr. Dudley is so well known as an authority on plastic surgery of the vagina and adjacent tissues that one instinctively turns to the chapters dealing with this subject. Here will be found many original suggestions and illustrations, including his recent operation for retrodisplacement and prolapse of the uterus.

The first feature of value in the work is that it is practical. It presents, as a whole, the views and results of a man of large experience and is sound and conservative.

MILLER.

---

## Publications Received.

---

**W. T. Keener & Co.,** Chicago, 1904.

*The New Methods of Treatment*, by Dr. Laumonier. Translated by Dr. H. W. Syers.

**D. Appleton & Co.,** New York, 1904.

*Surgical Emergencies. The Surgery of the Abdomen. Part I, Appendicitis and other Diseases about the Appendix*, by Dr. Bayard Holmes.

**Dios Chemical Co.,** St. Louis, 1904.

*The Perpetual Visiting List and Pocket Reference Book.*

### Miscellaneous.

*Annual Report of the Health Department of the City of Louisville, Ky., for the year ending August 31, 1904.*

*Practical Dietetics*, by Alida Frances Patton.

*Department of Health City of Chicago for the years 1899 to 1903 inclusive.*

## Reprints.

*Strongyloides Intestinalis in Texas, with Report of a Case*, by Dr. John T. Moore.

*Post Operative Malaria, with Report of Two Cases*, by Dr. John T. Moore.

*The Occurrence of Taenia Nana in Texas*, by Dr. John T. Moore.

*Suprapubic Enucleation of the Prostate*, by Dr. H. O. Walker.

*The Finsen Light, X Rays and High Frequency Electrical Currents in Certain Diseases of the Skin. Another Year's Experience*, by Dr. L. Duncan Bulkley.

*The Danger of Copper as a Water Purifier*, by Dr. A. Robin

*Case of Strangulated Meckel's Diverticulum Complicating Typhoid Fever*, by Drs. Joseph Sailer and Charles H. Frazier.

*Clinical Lecture on the Symptomatology and Treatment of Trifacial Neuralgia*, by Dr. Charles H. Frazier.

*Report of a Case of Decapsulation of the Kidney (Edebohls' Operation) for Chronic Parenchymatous Nephritis*, by Drs. James Tyson and Charles H. Frazier.

*A Discussion of the Surgery of Tumors of the Brain, with a Resume of the Operative Records of Four Craniotomies*, by Dr. Charles H. Frazier.

*Physiologic Extirpation of Ganglion of Gasser; A further Report Upon the Treatment of Tic Douloureux by Division of the Sensory Root of the Gasserian Ganglion; The Surgical Treatment of Facial Palsy*, by Drs. Chas. H. Frazier & William Spiller.

*Immunity from Tuberculosis. Its Production by Fat Foods and Out Door Camp Life. The Habit of not Eating Fats Leads to Their Non-Digestion Mal-Nutrition and Tuberculosis. Camp and Out Door Life as an Aid to the Permanent Cure of Tuberculosis. Evidence as to the value of Fresh Air and Out-of-Door Tent Life for the Tubercular. The Cure of Consumption by Feeding the Patient with Subcutaneous Injections of Oil and Its Digestion by the White Globules of the Blood. Some of the Physiological Uses and the Formation of the Adipose Tissue of the Body and Its Relation and That of Fat Foods to the Prevention of Tuberculosis. The Absolute Cure of Tuberculosis by Subcutaneous Injections of Oil*, all by Dr. Thomas Bassett Keyes.

*Some Random Notes on Diseases of the Rectum. A Consideration of some of the Methods to be Pursued in the Diagnosis of the Diseases of the Rectum and Anus from the Standpoint of Their Practical Importance to the General Practitioner*, by Dr. Lewis H. Adler.



## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)  
FOR NOVEMBER, 1904.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	6	4	10
Intermittent Fever (Malarial Cachexia) .....	5	1	6
Small Pox.....			
Measles.....			
Scarlet Fever.....			
Whooping Cough.....	2		2
Diphtheria and Croup.....	5	2	7
Influenza.....	1	2	3
Cholera Nostras.....			
Pyemia and Septicemia .....	4	1	5
Tuberculosis.....	44	46	90
Cancer.....	17	8	25
Rheumatism and Gout .....	2		2
Diabetes .....	3		3
Alcoholism .....	4		4
Encephalitis and Meningitis.....	6	2	8
Locomotor Ataxia.....			
Congestion, Hemorrhage and Softening of Brain.....	13	12	25
Paralysis.....	6	3	9
Convulsions of Infants .....	2	2	4
Other Diseases of Infancy .....	6	7	13
Tetanus.....	2	6	8
Other Nervous Diseases .....			
Heart Diseases.....	38	23	61
Bronchitis .....	3	3	6
Pneumonia and Broncho-Pneumonia.....	29	19	48
Other Respiratory Diseases.....	6	8	14
Ulcer of Stomach.....	1	1	2
Other Diseases of the Stomach .....	5	2	7
Diarrhea, Dysentery and Enteritis.....	21	10	31
Hernia, Intestinal Obstruction.....	1	3	4
Cirrhosis of Liver.....	5	2	7
Other Diseases of the Liver .....	2	2	4
Simple Peritonitis .....	1	1	2
Appendicitis.....		1	1
Bright's Disease .....	37	13	50
Other Genito-Urinary Diseases.....	4	4	8
Puerperal Diseases .....	2	2	4
Senile Debility.....	17	8	25
Suicide .....	6	1	7
Injuries.....	21	10	31
All Other Causes.....	18	6	24
<b>TOTAL.....</b>	<b>345</b>	<b>215</b>	<b>560</b>

Still-born Children—White, 21; colored, 14; total, 35.

Population of City (estimated)—White, 233,000; colored, 84,000; total, 317,000.

Death Rate per 1000 per annum for Month—White, 17.76; colored, 30.71; total, 21.19.

## METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure ..... 30.11  
Mean temperature ..... 61.  
Total precipitation ..... 1.90 inches.  
Prevailing direction of wind, northeast.



# *New Orleans Medical and Surgical Journal.*

---

VOL. LVII.

FEBRUARY, 1905.

No. 8

---

## Original Articles.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints may be had at reasonable rates if a **Written** order for the same accompany the paper.]

### **A Note on the Frequency of Multiple Sclerosis in Louisiana.**

BY ROY M. VAN WART, B. A., M. D., C. M. (McGill.)

Clinical Assistant in Diseases of the Nervous System, New Orleans Polyclinic; Visiting Physician to Charity Hospital; Neurologist to Touro Infirmary, New Orleans, La.

The distribution and frequency of multiple sclerosis has recently attracted considerable attention. The articles of Bramwell (<sup>1</sup>) and Jelliffe (<sup>2</sup>) present the most recent available statistics regarding America. From time to time records of individual cases or of cases presenting some special feature have been published, but no other efforts seem to have been made to estimate the frequency of this disease in relation to other nervous conditions.

The conclusions in regard to America in the articles of Bramwell and Jelliffe seem to have been based on the records of the neurological clinics in New York City. A careful search has not shown any other published statistics regarding America. The writer can speak from personal experience as to the probable correctness of these statistics, as the disease is comparatively infrequent in both Montreal and Baltimore, as well as New York.

It will become at once apparent that the conclusion of Bramwell<sup>(1)</sup> that this disease is "at least three and a half times more frequent in this country (England) than in America," while it is true for the Eastern United States and justifiable from the statistics at his disposal, is too broad. Though the large part of the population of the United States is crowded in the comparatively small area formed by the northeastern states, the consideration of the varying climatic conditions in a country as large as America must not be neglected. It is therefore not surprising to find that in Louisiana and the surrounding states multiple sclerosis is an extremely frequent disease.

Bramwell, basing his conclusions on his own private and hospital practice in Edinburgh, finds that one case in every 58 of nervous disorder is multiple sclerosis, a proportion of 1.7 per cent. Williamson<sup>(3)</sup> has shown that of 2,294 nervous cases in the Manchester Royal Infirmary 61 were multiple sclerosis, a proportion of 2.2 per cent.

For America Bramwell gives the statistics of 8 competent New York observers and places the frequency as 1 in 219 for both private and hospital practice. This proportion might perhaps be put still lower, as these patients are prone to wander from clinic to clinic, and may in this manner be unintentionally included more than once.

The statistics offered for the Southern states do not present this objection. The writer is connected with the free clinics of the Charity Hospital, the New Orleans Polyclinic and the Touro Infirmary, and all cases presenting themselves for treatment at more than one clinic have been only registered for the purposes of this study at one clinic. The possibility of this error is no small one, as many of the cases have presented themselves at all of the clinics successively.

The first 500 cases presenting themselves for treatment in the above-mentioned clinics and the neurological wards of the Charity Hospital, commencing February 1, 1904, have been used as a basis. In all there have been 22 cases of multiple sclerosis, a proportion of 4.4 per cent. This figure at first sight seems rather large, when compared with the statistics above given for New York, Edinburgh, and Manchester, and possibilities of error should be considered.

The diagnosis of this disease is by no means easy. In every case above noted the patient has been personally examined, and in the

majority the diagnosis confirmed by other members of the hospital staff. In one case an autopsy was obtained, and the typical lesions, both macroscopically and microscopically, were found. The majority of the cases were of the spastic paraplegic type, but as it is intended to publish them in detail in a future article no further mention of the symptoms will be made here

The etiology of the cases was not different from that usually assigned, and it was not possible to find any single factor that would explain the great frequency of the disease in this locality.

It is very desirable that statistics regarding the frequency of this disease in other parts of the United States should be published.

In conclusion, it may be said that while multiple sclerosis is a comparatively rare disease in the Eastern States, it is for some at present unexplainable cause a frequent one in Louisiana and the surrounding states.

#### REFERENCES.

1. Bramwell—"Review of Neurology and Psychiatry," Vol. 1, p. 12.
2. Jelliffe—*Journal of Nervous and Mental Disease*, Vol. XXXI, No. 7.
3. Williamson—*Manchester Medical Chronicle*, 1902, January.

---

### Vaginal Cesarean Section; Report of a Case.

By C. JEFF MILLER, M. D.

Professor of Operative Gynecology on the Cadaver in the New Orleans Polyclinic,  
New Orleans, La.

Nearly ten years have elapsed since the operation of vaginal Cesarean section was first performed by Acconci, and later described and recommended by Dührssen as a safe and rapid method of emptying the uterus in eclampsia. Notwithstanding Dührssen's enthusiastic arguments, and several contributions, it has not met with general favor, for, up to the present time hardly more than one hundred operations have been recorded.

It is interesting, however, to note the more frequent reports of cases during the past two years and the gradually widening field of its application. That it has gained favor as a method of accouchement forcé during the past five years is distinctly to its credit, for during this same period more attention has been paid to

---

\*Read at Birmingham meeting of the Southern Surgical and Gynecological Association December, 1904.

the perfection of manual dilatation and the invention of numerous metal dilators than ever before. Bossi, Frommer, Kaiser, De Seigneux, and others have all produced powerful instruments, ideal in theory, but furnishing varying reports from a practical standpoint, and the vaginal Cesarean section has had to share attention and heated discussion with each method. Those who favor the operation recognize that it has a limited field of usefulness; that it was never proposed as a routine procedure, but, will find its particular application in a class of cases not amenable to either manual dilatation, metal dilators, or abdominal Cesarean section.

J. Munro Kerr<sup>1</sup>, who has reported three cases in which the method was successfully used, states, as the first and greatest argument in favor of the operation, that sometimes it is the only method by which rapid emptying of the uterus is possible, as, for example, a case in which the cervix would not stretch, and another, reported by Ehrendorfer (a case of uncontrollable vomiting), in which the cervix could not be dilated.

Such cases are extremely rare; nevertheless obstetricians of extensive experience are liable to meet with them occasionally, and if they refuse to adopt this method they have no alternative but to pack the cervix and wait, and in some cases if they do they will lose patients.

One year after Dührssen's initial paper, in which he suggested the procedure in eclampsia, he advised it in abnormal growths of the cervix and lower segment of the uterus (carcinoma, myoma, rigidity, stenosis of the cervix and partial pouch-like distention of the lower uterine portion); dangerous conditions of the mother, which may be removed or relieved by prompt emptying of the uterus, affections of heart, lungs and kidneys, and conditions of the mother when death is imminent and can be foreseen.

This classification is really broad enough to cover the entire field for which accouchement forcé is ever indicated and will be promptly challenged by those who have, by experience, found measures such as the metal dilators satisfactory in each of these classes.

It is unfortunate that these two methods of treatment should have been pitted against each other to the extent that Bossi and Dührssen have carried the matter. In the end such contention only serves to confuse the obstetrician of moderate experience, without

---

<sup>1</sup>*Jour. of Obst. and Gyn. of the British Empire.*



distinctly pointing out the special merits and limitations of either method.

That the operation has come to stay, and will prove a valuable addition to our obstetrical resources, there is no doubt.

It will be the operation of choice in certain cases of rigid cervix, especially when complicated by extensive scars from previous labors; when it is necessary to empty the uterus promptly in instances of accidental hemorrhage, with the cervix still closed; and in some cases at present subjected to abdominal hysterectomy.

This, as you will see, limits the field to cases fortunately rare, but it makes it no less an operation of choice and advantage at a moment when time is an important factor. The chief objection to the operation is that it is not suitable to ordinary obstetrical practice. It requires a degree of surgical knowledge not usually possessed by the general practitioner, and should not be performed except under the strictest precautions of cleanliness. These are serious objections, yet it is safe to say that the consequences of performing the operation under the usual difficulties of obstetrical work are not more serious than dragging the head through a partially dilated os with forceps, a frequent practice which adds daily to the list of puerperal catastrophies.

So far its greatest field has been in advanced carcinoma of the cervix, complicating pregnancy. The general concensus of opinion seems to be that in such cases it affords the best method of avoiding the severe laceration and hemorrhage, and is a step towards the completion of hysterectomy, which should be performed after the uterus is emptied.

J. Whitridge Williams believes that the operation has a limited field of usefulness and should be reserved for such cases as those just mentioned.

Webster believes that in advanced carcinoma of the cervix labor should not be allowed to take place; that vaginal Cesarean section should be done if possible, and followed by hysterectomy. He places it before the Porro-Cesarean operation when feasible.

Puerperal eclampsia has furnished the indication for the operation in the next largest series of cases.

Dr. M. Stamm, whose paper was the first to appear in American literature, has successfully performed it in two cases, and also given us an extensive review of the German literature up to September, 1903. The Germans were the first to recognize its merits,

among whom is Bumm, who, it is interesting to note, has performed the operation thirteen times and expresses himself very strongly in its favor. Five of these were for eclampsia, and only one mother died (in coma).

In a personal letter recently received from Dr. M. Stamm, he refers to Hammerschlag's article (*Centralblatt. für Gynakologie*), who has collected 21 cases of eclampsia in which the operation was resorted to. Of the 21, 9 died. In ten, the convulsion ceased immediately. Three cases had from 1 to 11 convulsions after delivery had been completed.

Bacon and Carstens have also recently reported successful cases. In comparison with abdominal Cesarean section in eclampsia the vaginal route has many advantages. First, as to the mortality. In 34 cases of abdominal section on record, 55 per cent died, 4 of which were from sepsis.

Few will dissent from Spencer's<sup>2</sup> statement that abdominal Cesarean section is and always has been an absolutely unjustifiable operation for eclampsia, because the patient can be delivered by rapid dilatation per vaginum in less time and with less danger. If it is ever proposed it should not be with the idea of benefiting the child, except at full term, for Dührssen, in an analysis of fetal deaths in reference to the period of pregnancy, states that in the seventh month, and earlier, the mortality is 100 per cent, 93 per cent in the eighth, 54 per cent in the ninth, and 37.8 per cent at full term.

Such results point to the advantage of the vaginal operation in severe eclampsia after the fifth month and until the seventh, when the cervix is not easily dilated by ordinary methods.

It is but just to mention, however, that the chief advantage urged, that of the rapidity with which the uterus can be emptied, may only occasionally be of importance. Kerr alludes to this, and states that four or five minutes only are required. In most cases, however, he believes the difference of emptying the uterus in five minutes and in thirty minutes, as with Bossi's dilators, is immaterial.

PLACENTA PREVIA.—A few cases of placenta previa treated by vaginal Cesarean section have been reported. It is safe to predict, however, that the operation will never be adopted by practical ob-

---

<sup>2</sup>*Jour. Obst. and Gyn. British Empire.*

stetricians, for the same objections hold good here that have been raised to the abdominal route, viz.: that the other means of treatment are so satisfactory (so far as the mother is concerned) that it would be urging a method of questionable utility in behalf of the child at the expense of the mother. Moreover, I believe it is generally agreed that the fetal mortality is not susceptible of material reduction, for the reason that the pregnancy is generally terminated before term, when the chances of extra uterine life are relatively unfavorable. Of the two operations, vaginal and abdominal Cesarean section, everything being equal, the former would give the child equal chances, and the mother some advantage, both from standpoints of primary results and secondary morbidity.

ACCIDENTAL HEMORRHAGE.—While there is still a strong question of doubt as to the merits of the operation in eclampsia and placenta previa, little can be urged against it in the severe cases of accidental hemorrhage, when the cervix is closed and rigid, and the woman is becoming exhausted from the loss of blood.

Kerr, who could not predict the future of the operation in other affections, believes that its great place will be in accidental hemorrhage, in which so many recommend hysterectomy.

There is no question but that it possesses distinct advantages over abdominal hysterectomy, aside from the most important point that it is not a mutilating operation. As a working rule, it may be urged as the safest of the two operations when it becomes necessary to treat the case away from an equipped infirmary.

Since the case I desire to record was one of this type, the history is introduced here:

Mrs. J. H., age 28 years, had borne one child eleven years previous to this confinement. The delivery was tedious and accomplished with forceps. The perineum and cervix were severely torn and were never repaired. Her recovery was slow. For many months she had pelvic distress after physical effort—in fact, suffered all the inconveniences of relaxed pelvic outlet, together with sensitive cicatricial tissue in the vaginal vault as resulting from a laceration into the base of the broad ligament. Ten years later she conceived, and up to the beginning of the sixth month her history was that of a normal pregnancy. Then symptoms of renal insufficiency developed. The lower extremities became swollen, her face bloated, and she experienced severe headaches. Her urine contained considerable albumen. Rigid diet, saline purges and rest



cleared up the conditions quite satisfactorily. Toward the middle of the seventh month the anasarca reappeared and she was again put to bed and dieted, but after four days she returned to her household duties. About 2 o'clock in the morning, after an active day, sudden, severe pain developed over the front of the uterus and to the right flank. Later she fainted, but revived and summoned her midwife, who lived near, and stated to her that the character of the pain was such as to indicate that she was in labor. A slight discharge of dark blood was appearing at the vulva, and her pains grew stronger, but continuous. Her abdomen became very sensitive to touch and noticeably increased in size. She had intervals of comparative rest during the remainder of the night, but towards 6 o'clock A. M. she showed signs of exhaustion, fainted and changed for the worse so markedly that I was summoned. The picture presented was one of shock, the abdomen was very sensitive to touch, and the uterus gave a peculiar boggy feeling upon palpation towards the right flank. Fetal sounds could not be detected. Some fresh clots were found in the vagina, although the whole amount lost was comparatively small. The fornix vaginae felt boggy, owing to a blood clot in the lower uterine segment, and gave the impression that the case was one of placenta previa.

The cervix was closed and the old scar, extending into the vault, made the tissues unusually rigid.

The case was recognized as one of intra-uterine hemorrhage, and the woman was so profoundly shocked that something had to be done at once.

Since every minute was against the patient, and the parts were so rigid as to make rapid dilation out of the question, the operation of vaginal Cesarean section was undertaken at once. Only the anterior incision was made. The vagina was incised, the bladder stripped away and pushed upward, and the incision carried to a point just above the internal os. Podalic version was then performed and a dead child delivered, together with quantities of blood clots and the placenta, which was completely detached. The wound was closed with catgut.

There was no tear beyond the smooth incision, and the hemorrhage, which was at no time worth stopping to check, could be practically controlled by firm traction on the lips of the cervical incision. The peritoneal cavity was not opened. A hot rectal injection was given after she was returned to bed, and whisky in milk



administered generously throughout the day. She made an uneventful recovery, and is now quite as well as before the operation. The operation was performed at the patient's house without the usual convenience of the operating room, but the results could not have been better.

**HEART AND LUNG COMPLICATION.**—As to the efficacy of the operation in edema of the lungs, heart complications, and the condition described as the pre-eclamptic state, there is little to say. I do not believe it is an operation that any obstetrician should deliberately advise, except as a last resort. More particularly is this true, since it is a class of cases in which the matter of a half hour or so, necessary to dilate by the Harris method, or metal dilators, would not make any material difference.

**SUMMARY.**—Summing up the advantages of the method, it may be stated that—

1. In severe eclampsia, when the woman is unconscious between the convulsions, the cervix rigid and elongated, and delivery imperative, it is always preferable to abdominal Cesarean section, and, under proper surroundings, may be preferable to metal dilators.

2. In severe cases of accidental hemorrhage, when the cervix is closed, it is safer than the other methods of accouchement force, owing to the rapidity with which the uterus can be emptied, and should be given preference over abdominal hysterectomy, which is generally advised.

3. It may be considered in other conditions where Cesarean section is indicated, except in contracted pelvis, or dystocia arising from maternal or fetal disproportions.

4. It has not the disadvantages of an abdominal operation, the peritoneum need not be opened unless hysterectomy is to be performed for malignancy, and there is less shock than follows abdominal operations.

5. It is not more dangerous than attempting to deliver either by version, or forceps, when the os is not fully dilated, if done under strict aseptic precautions.

## Clinical Report.

### A Case of Intestinal Obstruction.

By F. C. BENNETT, M. D., Loring, La.

Patient, male child, 3 years of age, previously healthy, was taken Wednesday night with cramps. Detected a tumorous mass in abdomen. Suspected an intussusception. Parents declared that the child was wormy, but I paid little attention to this opinion. Child slept most of the time and suffered little.

Gave enema of solution of bicarbonate of soda, following with weak solution of hydrochloric acid. Four worms were passed as a result of this enema; tumor not affected. No blood in stools, no straining, no tenesmus. Made diagnosis of intestinal obstruction due to worms. Treatment for Thursday, Friday and Saturday:

First, *santonin* and *calomel*, every 2 hours for four doses; then *castor oil*, tablespoonful given hot every 2 hours till nauseated; then changed to *Epsom salts* every 2 hours; this soon caused nausea and was discontinued, and *Rochelle salts* given instead.

Absolutely no food.

Enema of hot water every 2 hours, child being placed with hips elevated to 45°.

Saturday, P. M.—The condition of child seemed about the same, except for the very evident general weakness. Tumor now seemed to be at the ileo-cecal valve and had a hard, sausage-like feel, and extended transversely across abdomen; operation suggested, but parents would not consent.

Saturday, at 6 P. M., *atropin*, gr. 1-30, was given per os.

Sunday morning I was informed that the child had been semi-delirious during the night and had symptoms of collapse. I attributed this to the *atropin*.

Tumor had shifted and appeared to be in ascending colon. *Castor oil* was detected in the stools.

Enemata continued every 2 hours.

Sunday, P. M.—A knot, consisting of 13 dead worms, varying in length from 6 to 13 inches, was passed, together with 20 separate worms. Bowels now began to act every few minutes; child began to call for something to eat. Recovery rapid and complete. Three days after this he passed 40 more worms; the next day 18 more.

In all, 91 worms were passed by this 3-year-old child. No convulsions nor fever at any time.

The child's father has a dozen hounds, which the child is in the habit of playing with daily. These hounds are probably the source of infection.

---

## Louisiana State Medical Society Proceedings.

---

[EDITED BY PUBLICATION COMMITTEE.]

P. L. Thibaut, M. D. Chairman.

---

### **Spinal Analgesia in Genito-Urinary and Rectal Operations.**

By CHAS. CHASSAIGNAC, M. D., New Orleans, La.

When confronted by the necessity for surgical interference, one of the most important of the points involved is that of avoiding suffering during such intervention; of even more concern is that of eliminating pain with safety.

While the discovery of general anesthesia was one of the greatest boons vouchsafed to humanity, it must be recognized that it is accompanied with danger, and, as a rule, the greater the experience a surgeon accumulates, the more he dreads chloroform or ether narcosis.

Experiments with mixtures or combinations whose boiling point is made to approach the temperature of the body, thereby increasing facility of elimination and safety, are fascinating, but they have not as yet evolved a perfect agent for practical purposes, though there is much promise for the future in this direction.

Bromide of ethyl, while efficient, is too transitory in action, and is itself not entirely free from danger.

The introduction of local analgesia by means of cocain and other applications and infiltrations, including the regional method, has been of enormous benefit in curtailing the domain of general anesthesia. Yet the duration of its effects is frequently insufficient, and danger is not eliminated except in such locations as permit the temporary control of circulation by means of pressure.

In spinal analgesia or cocainization we have an additional meas-

ure at our command; one not applicable to all types of cases, it is true; one with its disadvantages as well as advantages, like all things earthly; still, one of vast possibilities and possessing large claims to our favor, especially in genito-urinary and in rectal operations.

So much has already been said on this subject, so much was published, especially in 1900 and 1901, including articles by at least five local surgeons, Matas, Martin, Delaup, Gessner, and the writer, that it would seem superfluous to enter the field again unless in an essentially practical manner, on the basis of some extended and extensive observation.

It may not be amiss, however, to recapitulate briefly some of the salient points in the history of the method.

There is no question that J. Leonard Corning, of New York, was the first to produce some anesthesia of the cord. He published the results of his experiments in 1885, but it is in 1888, according to his own claims, that he "devised and executed" true subarachnoid cocainization.

To A. Bier, a German, is due the credit of introducing it as a method of analgesia in surgery; he obtained it to a degree sufficient to perform any operation on the lower extremities and published his experience in 1899. Tuffier, of Paris, is the one who extended the field of operation of this method and really popularized it, publishing reports at the end of 1899 and in May, 1900.

O. Kreis, a German, first reported, in July, 1900, the successful use of spinal analgesia during labor, while S. Marx, of New York, first reported an extensive use of this method in obstetrics in this country in August, 1900.

The urinary organs (excluding the kidneys), the genitals, and the rectum, are ideal regions for the application of spinal analgesia, as, on the one hand, they are within the sphere of the most rapid, most complete, and most lasting effects of the injection; and, on the other hand, they are the last to get under the effect of a general anesthetic and require a large amount of it in order to be kept thoroughly under its influence, including the abolition of reflexes.

Again, a good proportion of operations on these organs are apt to be in patients with renal or pulmonary complications, which cause us particularly to dread general narcosis.

My experience with the method dates back nearly four years, since the fall of 1900, and the conclusions reached are based upon



114 cases, nearly all genito-urinary or rectal. The majority of the patients were operated upon before my Polyclinic classes, and more than four-fifths of the injections were made by Dr. S. P. Delaup, my senior assistant, who is remarkably quick and accurate in their performance, and to whom I am indebted for keeping a record of them. The others were made by Dr. P. J. Gelpi, my other assistant, and by me.

In all the cases analgesia was produced. In all but two it was sufficient and ample; in these two nervous apprehension made it preferable to administer a little chloroform to avoid delay, but much less than would ordinarily have been needed. In none was there any bad result, and only in the minority were there any of the lesser disturbances, including vertigo, nausea, headache, vomiting, and elevation of temperature. Even these minor drawbacks have become of less frequent occurrence, as we have gradually fixed upon a more systematic and improved technique.

The shortest time in which analgesia was obtained sufficiently to proceed with the operation was three minutes; the longest, nine minutes; the most often, four or five minutes.

The longest duration of complete analgesia, as far as actually tested, was one hour and forty-five minutes. In no instance did it cease before the completion of operation.

The youngest patient upon whom used was 18 years old; the oldest, 81 years. The majority were males.

The operations performed have been external urethrotomy, prostatectomy, cystotomy, lithotomy, orchidectomy, curettage and cauterizations of serpiginous chancroids, for ulcer and for stricture of the rectum, for fistula in ano, for anal fissure, for hemorrhoids, for prolapse of rectum, for anal dilatation.

Several patients have been followed from one to three years, and in none have there been the slightest after-effect.

I shall now give the principal features of the technique followed, stating the reasons therefor when necessary.

1°. The patient's back is rendered sterile from below the scapulae to the coccyx, by scrubbing with hot water and green soap, mopping with alcohol, irrigating with bichloride of mercury solution, then covering with compresses soaked in same solution and secured by bandages. The spot of injection is again swabbed with alcohol just before the needle is thrust in.

2°. The operator is gowned and prepares himself as for a major operation.

3°. The cocain solution is fresh and is sterilized just before using, as are the needle and syringe.

The three points above are given special attention, as I consider the possibility of sepsis the only real risk accompanying the method.

4°. The patient is made to sit on the table, not too near the edge, and to incline and curve the back so as to increase the space between the vertebræ, sterile towels surrounding the operative area.

5°. The needle, one with a short beveled point, strong, and about 3 1-2 in. long, is introduced between the third and fourth lumbar vertebræ, because when done lower the result is not as prompt or as pronounced. The needle should be pushed slightly inward and upward until the cavity is entered.

6°. Three or four drops of spinal fluid are allowed to escape, first as an indication that the subarachnoid space has been reached; second, in order to make room for the cocain solution, thereby maintaining the same intraspinal pressure. Sometimes, if the pressure is not sufficient, the fluid will not run out of the needle, but it can be aspirated with the syringe. Once no fluid was obtained even in this way, although the space had been reached and a satisfactory result followed the injection.

7°. Five minims of a 4 per cent solution, one-fifth of a grain of cocain, are injected. Two or three minims more are sucked up into the syringe, as that quantity remains in the needle and against the piston. The syringe is allowed to remain in position for a moment to prevent the outflow of the solution before it has mixed with the spinal fluid.

8°. After the withdrawal of the needle the puncture is sealed with sterile cotton and collodion.

9°. The patient is allowed to sit for a few moments after the injection, and the head is well elevated on pillows when patient lies down in order to aid the downward diffusion of the solution. This seems to concentrate the effect below the point of injection and diminish the nervous symptoms.

10°. The patient must be made to understand that tactile sense will not disappear, and that the sensation of pain alone will be abolished. If indicated, the ears may be stuffed and the eyes bandaged. After analgesia has become established the operation may begin.

In weighing the advantages and disadvantages of spinal analgesia, as compared with general anesthesia, our attention is at once arrested by the striking difference in condition between patients under their respective influence. With the spinal method there is retention of consciousness, of the sense of touch, of voluntary motion. Abolition of all these follows deep, general anesthesia.

This difference alone is sufficient, in my opinion, to make it impossible that one can ever entirely replace the other.

The retention of all faculties except that of sensation of pain is an advantage or not according to circumstances. This is so obvious as scarcely to require illustration. If we need the patient's assistance physically (suppose he weighs 300 pounds), or if we may require his assent to a greater interference than was expected at the outset; also, if he has a terror of loss of consciousness, it is advantageous to be able to operate while he is awake. If, instead, he is very nervous, abnormally apprehensive of pain, and any voluntary movement is especially feared, it is better for him to be asleep.

On all other points my experience would seem to justify giving the preference to spinal analgesia, at least in genito-urinary and rectal work.

There is little doubt but that the immediate risk is less. Among the cases herein reported, there were several complicated with cardiac, pulmonary or renal lesions, one with all three, and a few in patients upon whom I would not have dared to induce general narcosis.

The danger of the secondary production of lung or kidney affections is apparently nil.

There is greater ease of application and the time necessary for obtaining abolition of pain and reflexes is shorter.

Fewer assistants are required, at least the anesthetist being dispensed with, and attention can better be concentrated on the operation proper.

Nausea and vomiting are less common or prolonged, and the dazed, irresponsible, and even delirious condition often following anesthesia is absent.

An opiate may be administered before the analgesia has passed, hence the patient may be saved the interval of suffering which is apt to exist at the time of awakening.

Finally a certain proportion of patients who are deterred from

seeking surgical aid through the dread of general narcosis will consent to an operation under spinal analgesia.

As often happens with medical or surgical discoveries or inventions, the advent of spinal analgesia was greeted with excessive enthusiasm by the profession; some claimed even that it was destined to displace general anesthesia; the pendulum swung too far in one direction. The reaction was inevitable; some disappointments cooled the enthusiasm; many abandoned the method; the pendulum had swung back too much.

My humble opinion is that spinal analgesia will not displace any other method, neither will it die. It fills its proper place in our needs. It has its indications and contra-indications like local infiltration and general anesthesia have theirs. The rest is a matter of individual judgment and preference.

---

### **Pernicious Malarial Fever.**

By CHARLES GALLOWAY, M. D., Lake End, La.

In making this selection for my subject on this occasion, I am aware that to some extent old wheat must be rethreshed, and only a small portion of good grain can fall to so late a gleaner. The importance of the subject, however, the continued high rate of mortality of pernicious fever, and the constant necessity for the help of others, assure me that the end is not yet as to its literature, and hence this paper. Of course, every one of us has read, or seen demonstrated, the histology of malaria.

The microscope has, in the hands of others, unveiled previously hidden mysteries, and what was once doubt is now clearly demonstrated. I may say, in passing, that this instrument is practically useless to the busy country doctor.

I shall, therefore, only mention here sufficient of its microscopic pathogenesis to fix its causation, and shall draw from Thayer, Flint and Osler for that purpose.

I shall adopt the plan of offering prophylaxis first, since it is better to prevent disease than to cure it.

Since its causation would be referable specially to the soil, air, altitude, and mosquitoes, I insist upon a thorough gauzing of every white man's house, living upstairs, if possible, planting Bermuda grass in the lawns around the house, or any other grass



which, forming a perfect sod, will prevent the ascension of marsh gas or other miasmatic influence from the ground. The drinking water should be winter-caught and carefully protected. The under-clothing should be, in the bottom country, of flannel, for here the lowered vitality, from low-grade functioning, will have to be neutralized by preserving equable body heat.

Attention to the diet is one of extreme importance to the cachectic individual, as over-indulgence places too much work upon the digestive organs, thereby attracting too much blood thereto and creating the pathology of chill.

One word more. After having had swamp fever, avoid giving quinin as its effect is to induce that condition to which the patient is already predisposed. Give salicin. It is nearly as efficient, and from it no danger is incurred.

The greatest attention should be given to the mosquito, for he is princeps criminis, and the other factors participes criminis only, from the standpoint of *res gestæ*. While the others are quiescent and passive and refer only to the indiscreetness of the individual patient, the mosquito gets in his fell, bloody, work, preferably by night—sufficient reason to exterminate him if we can, or sleep where he cannot reach us.

Only nineteen years ago the different types of malarial fever were discovered to be caused by different forms of malarial plasmodium. Of these, the estivo-autumnal, non segmentating, non pigmented, crescentic parasite claims our attention, for it is the cause of pernicious fever in all of its forms.

When the malarial bacillus reaches this stage of development, it is mature; whether it is excreted only to reproduce in other menstrea, still more micro-organisms, to adhere to still other mosquitoes, to inoculate still other patients with malaria; or, whether, after attacking the red corpuscles with a full grown appetite, it perishes in the conflagration it itself excites, and, building its own funeral pyre, executes self-imposed suicide, we know not; but we do know that the intensity and gravity of pernicious fever depend upon both its number and activity. And further, that quinin sulphate may be given ad libitum, and he will remain as festive as ever.

The forms of pernicious fever noted by me have been the gastro-enteric, comatose and hemorrhagic. This classification is intended to correspond with varieties seen in my own practice. I have not

mentioned the thoracic form, for the reason that the only case I ever saw terminated in coma.

The first is the gastro-enteric variety, and is the primary effect of the full grown bacillus upon the organism. At several points in Mississippi there have occurred epidemics of this form, a very graphic description of which was given me by my father.

The first indications would be pain over the liver and spleen, nausea and occipital headache. Then the chill, followed by excessive vomiting and purging, the stools containing blood, cold perspiration, gasping respiration, pulse often wanting at the wrist, and the oral temperature  $97^{\circ}$  or under.

Instead of hypodermics of strychnia and digitalin, the administration of tincture of capsicum and oil of turpentine, supplemented by hot mustard footbaths and hot bottles around the patient usually met the indications. No morphia or atropia. Upon establishing reaction, the irritation of the bowels would usually be controlled; then the usual calomel purge was given, followed by excessive dosing with hot willowbark tea. No quinin. And yet the patients recovered!

Although this was before and during the civil war, I do not know that it is necessary for me to add anything to the above symptomatology or treatment, with the exception that Warburg's tincture has been my sheet anchor in this condition.

The second form (the comatose) is the secondary effect of the crescentic bacillus, and is more to be feared, for how often in a life of practice will a physician see it end fatally after unremitting effort of both hand and brain, and, turning hopelessly to some other line of treatment, be still again defeated. Here no mistaken diagnosis will occur. The staring, fixed eyes, the Cheyne-Stokes respiration, frothing at the mouth, high temperature, and arrested secretions—after one or more malarial paroxysms—draw their picture (and usually in the memory of the physician) in a dark frame.

From the year 1889 to 1897 I treated seven cases of coma, all of which, be it said to my credit, were "gathered to their fathers."

After losing my first case I turned to my brother practitioners for help, and, although in every instance the response was generous and brotherly, and the aid material and intelligent, no rift appeared in this line of clouds, for each succeeding patient followed the lead of the first.

Coma was supposed by the older writers to be caused by an overcrowding of the brain by innumerable malarial parasites.

The secondary effect of the crescentic form upon the red corpuscle is to cause it to shrink and to change its bright luster for that of brass. The oxygen, therefore, is absent (for the corpuscle has been crippled and its proper office is no longer discharged), and the normal metabolism is dethroned; urea is no longer excreted, but retained in the blood. Added to this, the aggregation of excrementitious products retained by reason of deficient excretion and formed during the development of the malarial bacillus present an array of toxic elements or enzymes, which neutralize the alkalinity of the blood, and before which the central axis staggers, and, without prompt treatment, falls.

In 1889 I saw Dr. Miles, of the Charity Hospital, give pilocarpin with signal relief in uremic convulsions. In 1897 I read an article calling attention to pilocarpin as the most successful treatment for congestive chills.

Now, if uremia is present not only as a factor, but as the prime agent in the ultimate effects upon the brain, why is it not the rational remedy to use?

In my next case of coma I used one-sixth of a grain of pilocarpin subcutaneously. To my wonder the patient's mind was clear in about three and one-half hours, and she called for water. Upon resumption of cerebral action, the centers themselves were beginning to act normally, for the pupils reacted to light, and the stertorous breathing was gone; then move the bowels and the kidneys at once! Croton oil, two drops repeated in two hours, if the bowels failed to act. Spirits of Mindererus, acetate of potash, and sweet spirits of nitre for the skin and kidneys. As soon as the bowels have acted salicin, 20 grains, followed by a like dose in four hours, or Warburg's Tr., 5iss and your patient usually recovers.

I have treated in this way nine patients without the loss of one. Dr. Chapman, of Lake End, has treated four, with one death.

The late Dr. S. W. Greening, of Campti, applied to me for help in a case of coma, and, upon my advising him to use pilocarpin and supplement it with strong elimination all along the line, reported on the following day that his patient was out of danger, and, subsequently, that he recovered.

Hypodermoclysis has not been used by me in this condition, but is, I should think, rational procedure.

I shall now discuss the hemorrhagic form, hemoglobinuria, the ultimate results of the crescentic parasite.

With all due respect to those gentlemen who make quinin their sheet-anchor of hope in this as well as every other malarial condition, I must now and here enter my most emphatic protest. I assert that they have never yet proven that hematuria is post hoc rather than propter hoc.

The usual history is a few chills, then a cachectic condition, and last the hemoglobinuria. The nausea is the first symptom to notice, for upon the power of the stomach to retain depends our success. Bismuth, carboic acid, oxalate of cerium, or a few drops of a 4 per cent solution of cocain would usually meet the indications here. Then calomel, 10 grains, followed by sodium phosphate, 1 dram every four hours, to maintain the action of the bowels. Then:

Prescription No. 1—

Spts. Nitrosi ætheris, dram 1-2.

Liq. Potassæ arsenitis, drops 6 (or if urgent 10).

Water, ounce 1.

To be given every four hours, alternating with

Prescription No. 2—

Tincture chloride of iron, drops 15.

Tincture nucis vomicæ, drops 10, water, ounce 1.

Hot mustard footbaths to promote the action of the skin and aid in keeping up the elimination.

You will observe that I have insisted upon the strongly eliminative treatment in every variety of pernicious fever.

Unfortunately, we have occasionally a suppression of urine. It is not necessary that I shall recall the heartrending scenes which nearly all of us have witnessed. The hemorrhage, the depression, nausea, lumbar pain, suppression of urine, and, finally, the hicough and the patient's demise. To those of us who have been actively engaged in the practice of medicine in a malarial district, it has been only necessary that the patient be found suffering from suppression of urine that your co-workers give you a hopeless prognosis.

Gentlemen, if mine is a case of "vaulting ambition o'erleaping itself," or if, like Icarus, I am attempting to fly too high with waxen wings, I must crave your patience, for I am well aware that in the theory which I am about to advocate I am forgetting the "landmarks of our fathers."



My query is: Is there ever a total suppression of urine? I have never seen it. For, upon passing the catheter, you can always draw off a few drops of discolored urine.

Second: Is it true that the uriniferous tubules have become choked with the waste products of the blood? I must again answer, No. If the uriniferous tubules were choked, no urine could appear in the bladder.

When the malarial parasite attacks the red corpuscles we have, ultimately, its disintegration and separation into acid excrements and carbon dioxide. This excrementitious product neutralizes the alkalinity of the blood, and is the direct mechanical cause of suppression of urine.

I take the position that no obstruction exists in the kidneys for, although the debris is acid in reaction, the high temperature is maintained, preventing the formation of clot, and when was a clot formed in a high temperature?

Lower, in the ureter, where its small wave-like motion is scarcely sufficient to promote the onward flow of normal urine and where the temperature is materially less from its limited arterial supply, must we look for the trouble.

Here the acidified debris of disintegrated blood, having passed from a higher to a lower temperature, and, becoming cooler, agglutinate. This is finally gathered in sufficient quantity to make an effectual dam, and we have the suppression of urine. Do we now throw up the sponge and desert our patient? No. The obstruction is acid in reaction and formed by passing from a higher to a lower temperature. Then alkalinize it. Raise the temperature, and put the clot again into solution.

I have followed the plan of filling the bladder to overflowing with a hot, normal, salt solution, which, by constant pumping in, will flow through the oblique mouth of the ureter, and, eventually, reach the obstruction. Why fill the bladder? Our authors have advised high enemata. Why? Because sufficient heat might be conveyed through the wall of the rectum to the adjacent parts to raise the temperature and dissolve the clot.

I ask which is the more reasonable: to inject your solution into the bowel, or at the spot where needed? In other words, How can you best reach the genito-urinary canal, where the obstruction undoubtedly is located? By the rectum or by the bladder?

The next step in the treatment is to stimulate central action with strychnia, alkalinize the blood and stimulate the adrenals with normal salt solution by hypodermoclysis. It is my honest opinion that 50 per cent of the cases of suppression of urine in swamp fever can be cured by this procedure. I have treated five cases in the last four years, restoring the urine in three, and with the total recovery of two.

I am informed by Dr. Young, of Campti, La., that Dr. Slaughter, whom I so advised, succeeded in one case in this manner.

After fifteen years of quest for something upon which I could depend to get my patient out of his cachectic condition and remain at home, I have evolved the following prescription:

Arsenious acid, grain 1-30.

Salicin, grains 3.

Reduced iron, grains 2.

Strychnin, grain 1-60.

Phosphorus, grain 1-200.

Podophyllin, grain 1-16.

Capsicum, grain 1-8.

Ext. Gentian, p. s.

One after each meal.

I believe that no one, after hearing this prescription, will say that I fail to treat.

This paper is written not to attempt to lead, but to point you to that never failing talisman of victory, HOPE, for from that alone can we draw inspiration for the arduous work before us; and if investigation of this important subject be stimulated along a new and untried line, its object will be fully met.

---

### Hypotensive Medication and Dechloridation.

By E. M. DUPAQUIER, M. D., New Orleans, La.

Among the many interesting facts regarding chlorid-retention, it is worth while noticing that the latter is also capable of causing hypertension. Therefore, in the treatment of nephritis with edema and hypertension, for example, dechloridation is paramount.

It is also of practical importance to note that the classical milk diet as a means of dechloridation is not only inadequate, but in-

consistent, as in many cases the free use of fluids causes hypertension. Given a case of nephritis with edema and hypertension, for example, properly applied dechloridation alone will prove to have a very decided hypotensive action. Alone, it can compare favorably with active hypotensive agencies, including the wonderful diuretic, theocin, and the classical hydragogues, which all have their drawbacks, exhausting the renal and intestinal cells.

In other words, the routine treatment with diuretics and hydragogues, and with the unreserved use of digitalis fraught with danger, is wrong, and dechloridation first, last and all the time is the fundamental therapeutic measure in nephritis with edema and hypertension. What is meant by dechloridation?

The retention of sodium chloride being the cause of edema, and it being a dangerous element in nephritis, it follows that its use should be restricted in the diet of such cases. It must be almost entirely discarded. To the minute quantity of sodium chloride in milk does the latter owe part of its beneficial properties in nephritis, namely: decreases of edema and albuminuria. But, milk is insufficient in many respects, firstly, in a general way for sustaining the powers of the patient; secondly, in a specific way, for obtaining invariably the diminution of edema and albuminuria. Again, as stated, fluids will increase hypertension. Diet in chronic nephritis has been greatly enlarged and improved, a more liberal diet is now given, in fact recommended. Patients with chronic nephritis should be allowed a fairly generous amount of animal and vegetable nitrogenous food, the amount being to cut down to about the quantity indicated by 30 grams of urea per day. White and red meat are equally valuable, and the latter is not more harmful and does not contain more extractives. Carbohydrates and fats are all given provided no salt is added to them no more than to the meat and other proteids, either in the kitchen or at the table.

We, therefore, can and should relieve the patient of the strict milk diet by the use of all foods provided no salt be present in or be added to them.

A substitute for the milk diet in cases in which it had failed has been used by Laufer with good results. It is a special chlorid-free diet and is composed of the following articles:

Rice, 200 grams; wheat flour, 300 grams; Irish potatoes, 500

grams; cream cheese, 100 grams; sugar, 100 grams; water, 1 quart.

This alimentation contains no more than 25 centigrams, at most, of sodium chloride.

One gram of salt was allowed with the Irish potatoes. The wheat and rice were made into paps with sugar. The patients took this diet with relish.

Under this chlorid-free diet, yet pleasant, the edema and the hypertension which resisted the milk diet were rapidly reduced.

#### BIBLIOGRAPHY.

*Pathologie Interne. Dernière édition, 14 ième, 1904.*

*Journal de Médecine Interne, Mars 1, '04.*

*American Year-Book, 1904.*

---

### One Hundred Cases of Successful Spinal Cocainization.

By S. P. DELAUP, M. D., New Orleans, La.

Having for some three years past been in the habit of employing spinal cocainization for surgical operations below the diaphragm in my own work and for Dr. Chassaignac before his Polyclinic classes, the merits and faults of the procedure are tolerably familiar to me, and in spite of several drawbacks which attach to the method of abolishing pain, there can, I think, be little doubt that it has a future before it, and when the principles which underlie it are well understood, I believe it will be widely employed.

I should like now to mention some of my own experiences with this form of analgesia, and to add 100 cases for the use of the statistician, and as a further argument in favor of this method.

In all these cases analgesia was induced in this way for operations of all degrees of severity from an anal fissure to a Wyeth's amputation at the hip joint. The patients' ages ranged from 18 to 81; all but 4 were men. Some patients were extremely debilitated or suffering from serious affections, which contra indicated general anesthesia. Not a single mishap occurred in any instance.

The severest test to which the method was applied was in the youngest patient, a boy of 18 years, who suffered from a round cell sarcoma of the femur, involving the knee joint. He was much



depressed, and at the time of the operation had a temperature of 103. A Wyeth excision was performed; there was very little hemorrhage, but the shock was so pronounced as to require infusion.

The ninety-seventh case, that of an amputation at the upper third of the thigh, also developed such profound shock that infusion had to be resorted to. In both cases the patients easily rallied from the shock, and rapid recoveries followed. I have observed that those patients advanced in years stand this method of analgesia remarkably well, and I had the opportunity of testing it on an old man of 81 years, on whom Dr. Chassaignac performed an operation for hemorrhoids by the angiotribe and cautery method.

In point of weight, a woman of 260 pounds, requiring relief from hemorrhoids, was the heaviest. In this case the spinous processes of the vertebræ could not be made out, and the needle had to be thrust through blindly. These patients suffered no pain whatever, and, barring a slight headache, complained of no after-effects.

My last two cases are interesting from the fact that in both cases after entering the subarachnoid space no fluid escaped. In one case the fluid was gotten by aspiration; in the other even aspiration did not bring out any fluid, but being sure that the needle had penetrated the canal, I made the usual injection, and successful analgesia followed within five minutes.

In all these 100 cases, with the exception of one only, the analgesia was thorough and successful. I must say that the unsuccessful case was that of an old excitable Frenchman, on whom a suprapubic cystotomy was performed. He complained some when the bladder was distended, and as Dr. Chassaignac had promised him freedom from pain, a few whiffs of chloroform were administered.

In an attempt to ascertain the exact number of deaths from subarachnoid cocainization I have met with so many contradictory statements from both enthusiastic and disappointed reporters and reviewers that I must qualify as unreliable and uncertain all ratio of mortality based on the present obtainable data. Dr. Perkins, in a similar endeavor to obtain a mortality rate, got a ratio of 1 death to 146 cases, notwithstanding the assertion that the time is not yet ripe for a definite conclusion as to the dangers of the method, and the doctor still further guarded this assertion by the

statement that even as to the relative dangers of chloroform and ether, we have as yet no definite, indisputable statistics.

It is asserted that the method has an excessively high mortality rate as compared with other methods of producing analgesia. Researches in the literature of the subject have not borne this statement out. Mark, of Kansas City, in commenting on this subject, made an analysis of the reported cases, which I shall here quote:

"In the European record of over two thousand cases, there appear six deaths—Tuffier, Gorlar, Jonnesco, Dumont, Juillard, and Heumberg each reporting a death. In the cases of Gorlar and Jonnesco the cause of death is by no means clear, and in studying the cases of both from a clinical and post-mortem standpoint, I am inclined to the belief that the blame was attached to the cocaine by a process of negative reasoning. In Dumont's case, that of a tuberculous boy in a bad, general condition, death occurred two days after cocainization. While no evidence was adduced at the post-mortem that the injection caused the death, still, no other positive reason could be found. Therefore, reasoning by negation, the cocain was responsible. In Tuffier's case death occurred twenty-four hours after the operation from acute edema of the lungs and a mitral lesion. \* \* \*

In Juillard's case death occurred on the second day succeeding operation from rupture of an aneurism of the sylvian artery. \* \* \* Heumberg's case, out of all reported, is the only one which incontrovertibly must be laid at the door of spinal cocainization. In this case autopsy disclosed a hemorrhage into the cauda equina, due to puncture of the spinal veins."

In this country there has been one death reported, that of Morton's. This case was one of strangulated hernia in an old woman weighing 318 pounds, with a very serious heart lesion. Dr. Morton does not think from post-mortem findings that the cocain had anything to do with her death.

So the problem is not alone cocain, but cocain plus the lesion operated for and the physical state incident to the time. At all events, at the present time it is, I believe, impossible to obtain a correct, trustworthy mortality rate.

The structures overlaying the spine in the lumbar region, through which the subarachnoid space is entered, are skin, muscle, aponeurotic fibers, and more or less fat. At times the depth of fat

is sufficient to make the distance to the canal greater than the length of the needle, and some ingenuity is required to make an entrance at the first attempt, particularly if the spine landmarks are not found.

Extending from one articular process to the other is an interval of about a quarter of an inch, in which is the ligamentum subflavum. The dimensions of this space is modified somewhat by position so that on bending forward and to the left the space on the right side is moderately increased in size.

The medulla ends at the lower level of the first lumbar vertebræ; from this descends the cauda equina, and the nerves forming it seem to be bunched with constant uniformity, capillaries and lymphatics running between them and surrounded by a venous plexus. Pricking of the cauda equina with the needle is inferred by complaint of pain, either in one foot or the other.

The skin of the back and loin should be prepared as carefully as before an abdominal operation, so that free manipulation of the back and a proper search for the spinous processes made. A good plan is to have the patient well bowed forward, with the bend at the lumbar region. Finding the lower limit of the spine selected, generally the third, take a point a little less than a quarter of an inch below and a half inch to the right for the point of entrance of the needle. As the only sensitive tissue is the skin, this can be frozen with a spray of ethyl chloride, and a puncture made with a bistoury, or, as is my custom, the puncture may be made without preliminary analgesia of the skin. The needle is introduced obliquely from below, upwards and inwards, or, to use Dickinson's words, "pointing to 5 o'clock," and the finger easily appreciates when the ligamentum subflavum is penetrated.

Once in the canal, fluid generally comes, but at times it must be started by a cough or straining effort or aspirated with the syringe. This fluid is always clear and limpid, and an amount equal to that thrown in is allowed to escape. The needle which I have employed is an ordinary steel, aspirating needle, ground to a short bevel. It must be sufficiently long to penetrate easily the space between the skin and subarachnoid space. I have used a plain 4 per cent solution made with sterile water, and at the time of the operation heated to the boiling point. Some surgeons prefer the 2 per cent solution, using a larger quantity of it.

Others like Morton advocate the use of the cerebrospinal fluid to dissolve the cocain.

Tuffier, the advocate and popularizer of the method of spinal analgesia for surgical purposes, and who, next to Corning and Bier, deserves the most credit for his work on the subject, has adopted Morton's method of using the patient's own cerebrospinal fluid as the vehicle for the cocain, but he considers it dangerous to mix them exposed to the air for fear of possible infection from germs in the air. He sterilizes a sealed vial containing 4 c. g. of cocain, dissolved in 7 drops of sterilized distilled water. This makes a 12 per cent solution. He breaks the tip of the vial and aspirates its contents into the syringe, allowing no air to enter it. He then makes the lumbar puncture with the needle detached from the rest of the syringe. As soon as the cerebrospinal fluid is flowing through the needle he adjusts the body of the syringe to the needle, and the cerebrospinal fluid flows into it slowly, pushing up the piston as it enters, until the receptacle is full, and blends with the concentrated solution of cocain already in it. He then injects the mixed fluid. For operations below the umbilicus he finds the method effective, and the after-effects infinitely less. He recommends his old technique for abdominal operations, of which he has performed more than 1,200. Guinard has also employed the cerebrospinal fluid as a menstrum for the cocain, but he first dissolves the drug in a small amount of water. Quite recently Bier and Donitz say that further observation has led them to conclude that the dangers of spinal analgesia can be completely obviated by combining an adrenalin solution with the cocain. The latter agent has been found more satisfactory than any of the substitutes that have been proposed and is therefore retained.

As soon as cerebrospinal fluid escapes 1 c. m. of a 1-2000 solution of adrenalin is injected. The solution is made as follows: 5 c. c. of adrenalin solution is mixed with an equal amount of physiological salt solution and boiled before using. The syringe is allowed to remain in place to prevent the escape of cerebrospinal fluid, and at the end of five minutes a solution containing from .005 to .02 gm. of cocain is injected through a second syringe. The cocain is prepared by dissolving 1 gm. in 10 c. c. of sterile physiological salt solution. Alkalies precipitate the cocain base, and conse-



quently the syringes must not be boiled in soda water, but in pure water.

In all, 121 cases were anesthelized in this way for operations of all degrees of severity. In none was the slightest evidence of danger observed, and Bier is convinced that by this new technique the real dangers of spinal analgesia are obviated. A precaution that is advised by Bier is to keep the patient's shoulders elevated throughout the operation so as to prevent the cocain from traveling too far up the cord and never to employ the Trendelenburg position. After extensive experimentation regarding the action of adrenalin in local anesthesia, Braun has determined that a solution of adrenalin alone does not produce anesthesia, but when added to solutions of cocain or eucaine it increases the anesthetic property of these drugs to an extraordinary degree. Experiments upon animals demonstrated the fact that the toxic effects of cocain are greatly diminished by the addition of adrenalin. Tropa-cocain and adrenalin were found to be incompatible, the latter losing the vasoconstricting qualities in the presence of tropa-cocain.

I have not yet experimented with cocain thrown into other regions as to the ability to obtain a similar result, and perhaps if such effort were made it might be found successful. Morton has further demonstrated the effectiveness of the method by performing a complete excision of the superior maxillary bone after a lumbar puncture.

This case is of interest as showing how high an operation may be performed under the method. He found the analgesia about the mouth as complete as in the lower extremities, and has failed to find any more constitutional disturbances than when the analgesia was used for operations on the lower extremities. He especially recommends the method for operations on the mouth where the danger of blood and secretions entering the lungs and producing suffocation, or later pulmonary complications is eminent. An advantage that should not be overlooked is that the anesthelizer is out of the way of the operator. Danger of infection of the cord is an idle one to a careful surgeon accustomed to careful sterilization of instruments and skin, when the cocain has been properly sterilized. The possibilities of harm present or remote arising from the use of spinal cocainization, barring idiosyncrasy, are grad-

ually narrowing themselves to such limits as to cause little concern to the user.

The points that have particularly struck me in my cases have been the almost complete absence of shock, an element invariably present in general anesthesia, and the lack of unpleasant symptoms following the injection. In genito-urinary and rectal surgery the method is truly ideal. The nausea and vomiting of spinal cocaineization, if they are present, are slight and transient, and can give rise to no concern.

Based on an experience of a little over 100 cases, I believe that the following conclusions are justified:

*First.* That the method is as safe as, if not safer, than general anesthesia.

*Second.* That we may safely employ up to half of a grain of cocain without fear of toxic effects.

*Third.* That shock, when present, is decidedly less than that of general anesthesia.

*Fourth.* That it is attended with less danger of annoying sequelæ and symptoms.

*Fifth.* That it can be relied on for prolonged operative procedures.

In this last conclusion I dissent from similar conclusions reported by Dr. Mark, of Kansas City, but my cases of prostatectomy, external urethrotomies without guide, and other serious and tedious operations, are evidence enough for my assertions.

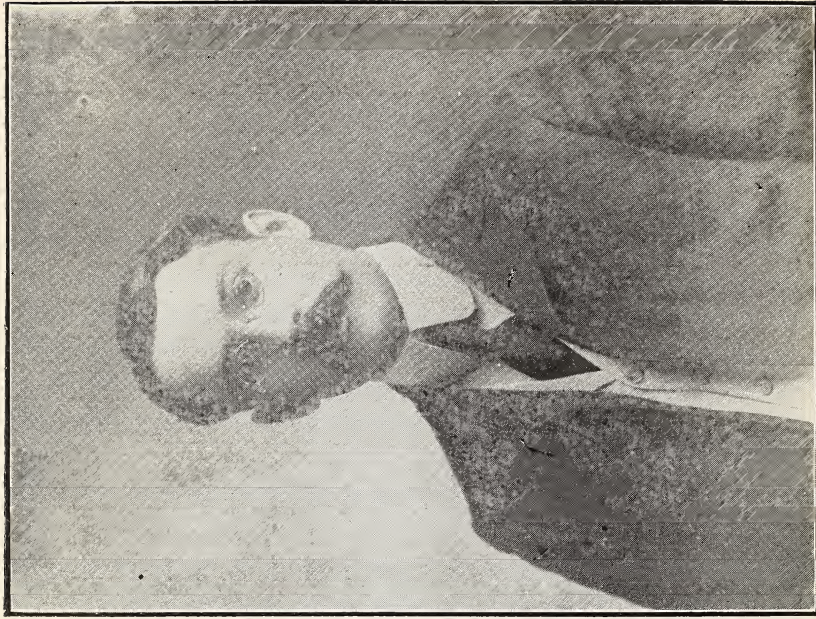






DR. JOSE E. CALVO, Secretary,

Fourth Pan-American Medical Congress, Panama, January, 1905.



DR. P. DeOBARRIO, Treasurer,

Fourth Pan-American Medical Congress, Panama, January, 1905.



## Society Proceedings.

---

### **The Pan-American Medical Congress.**

The medical men of Panama accepted that as the place of meeting almost under protest, arguing the time as precocious by some years for a medical gathering in Panama. Perhaps it was best as it happened.

The importance of a Pan-American Medical Convention was first realized in Washington, D. C., in 1893. Then a representative body of men organized the Congress, to meet every three years. In 1896, a second successful meeting was held in the City of Mexico and the government spared no pains to make it a success. In 1899, the place of meeting selected was somehow unfortunate and the Third Congress finally gravitated to Havana, Cuba, where a good meeting was held.

Excepting for some occasional reference very little was known of the Fourth Congress, which finally was arranged for January 3, 4, 5, and 6, 1905, and to take place at the City of Panama.

Both the editors of this JOURNAL were fortunate enough to attend this Congress and a report of what transpired is here given our readers at first hand.

We can only do service to the next Congress by stating that excepting on paper, no adequate arrangements had been made for transportation, and, excepting for the constant courtesy of the United Fruit Co., sending ships out of New Orleans, a meagre attendance would have resulted. As it was, there were very few representatives of South or Central American States, and the total attendance was less than half the number expected. Unfortunately for those who came from the Eastern States, arrangements had been made with the di Giorgi Steamship Company, of Baltimore, to go by the S.S. *Athos*, which was represented in the circular issued as especially suited for tropical trade, and scheduled to arrive at Colon by January 2. Because of these representations almost every one asking information regarding the trip was ad-

vised to go via Baltimore, and the *Athos*, and, as a matter of actual fact, two delegates from Mexico went to Baltimore to get to Colon and Havana!

The United Fruit Co. sent two vessels with those who came via New Orleans, and about 30 delegates arrived on January 2 at Colon, by the S.S. *Beverly* and the S.S. *Ellis*. With a few representatives from Peru, Costa Rica, from Guatemala, Honduras, and the local profession of Panama, this constituted the Congress. The *Athos* contingent arrived on the last day and participated in the final session Friday night. With these, about 30 in all, the attendance at the Congress numbered less than 100 and the registered members possibly half that, as there were a number in attendance who enjoyed functions and meetings without qualifying.

The arrival at Colon was marked by the prompt courtesy of the Panamanian Committee, represented by DR. OBARRIO, the treasurer, and later by the President, DR. ICAZA, both of Panama. Arrangements were made for railroad transportation and full information was furnished regarding the proposed plans for the meeting. Among those who reported the first day of the meeting may be named Drs. Nicholas Senn of Chicago, W. L. Hughes of St. Louis, Emilio Martinez of Havana, representing Cuba; Geo. W. Crile of Cleveland, S. D. Risley and R. G. Curtin of Philadelphia, W. M. Balmer of Wisconsin, J. Purnell of Mississippi, J. W. Newman, J. Frank, H. T. Byford, D. R. Brower and Lucy Waite of Chicago; J. Coleman of Texas, Howard Morrow of San Francisco, J. N. Thomas, Charles Chassaignac and Isadore Dyer of Louisiana.

Too much cannot be said of the share taken in our care and entertainment by the various medical officers of the Army and Marine Hospital Corps. We shall always remember in this regard Drs. Jno. W. Ross, J. C. Perry, R. H. Carter, W. C. Gorgas, C. C. Pierce, H. A. Stansfield, E. H. Bates, L. W. Spratling, T. C. Lyster and L. A. Lagarde, each and all of whom at all times contributed much to our comfort and education. Almost all of the delegates were quartered at the Hotel Central, a huge hotel, built around an open patio and running up five stories in height. While primitive in the equipment of its rooms and still new with paint, the chief surprise at this caravansary was in the table, which was very good indeed.

The Congress began on Tuesday afternoon with a reception at the palace of the President. Dr. Amador, Mrs. Amador, one or two ladies of her household, Secretary of Foreign Affairs Aguardia, and some of the local committee, received. The Panamanian band played national airs, and after light and liquid refreshment the reception was over. The affair was formal, simple, dignified and in keeping with the little republic. At night the formal opening of the Congress took place. Addresses were delivered by President Amador, welcoming the meeting, by Dr. W. C. Gorgas, on "*Isthmian Sanitation*," by Mr. Tracy Robinson, on "*The History of the Canal*," by the President of the Congress, Dr. Icaza; by Dr. Calvo, the Secretary, and by no means last, by Mr. J. M. Wallace, on the canal proposition itself.

Mr. Wallace remarked that he had no intention of making a formal address, but that very much had been said in the newspapers regarding the Panama Canal and those connected with it, so he thought it might be well on this occasion to correct mis-statements and to put himself on record in the matter.

He began by briefly reviewing the fact that the first proposition for an Isthmian Canal came from an American, but that this had died before it had matured. The story of the French attempts and failure was well known, and now the Americans would have another try, this time, he hoped, with ultimate success. The French efforts will materially aid the present work. De Lesseps had proposed a sea level canal, and it only failed because of funds at the required time. The present Commission have commenced at opposite ends of the canal. Whatever estimates have been given have been purely speculative. Mr. Wallace has made no estimates; he has only "answered questions." He now states his faith regarding the practicability of a canal, but has expressed no opinion, in fact, he has none.

So far as any review has been made concerning the work accomplished on the canal hitherto, it might be stated that 25 per cent. of the work has been done with a high level canal in view and over 10 per cent. for a sea level canal.

A vast amount of material had been left by the French. Two thousand and four hundred buildings, more or less dilapidated, had been spread along the zone. The Panama railroad is included in the purchase. Any amount of machinery has been dis-

covered rusting among the tropical undergrowth. Vast quantities of this may yet be used. Already six months have been spent in preliminary work, and much more will be needed to investigate and make inventory of supplies. The several storehouses of the French are in excellent condition. The present Commission have investigated Chagres River, Colon, and other localities, and have decided that for the present the work at Culebra alone could be best continued. Mr. Wallace stated that it would be impossible to make plans until "the case was diagnosed." To that end all possible data were being collected to estimate the cost of the completed canal. When this has been done, the Commission and the engineers will report to the American people as to what may best be done.

The problem of the Panama Canal is unique. It includes making a harbor out of the open roadstead at Colon; renovating Panama; controlling the Chagres River; converting it from a menace into a help, and possibly tunnelling it to either sea. It includes the electric lighting and water supply of the whole zone; besides, Panama should be sewered and paved.

There are three characteristics in the work of the Panama Canal:

1. Ordinary dredging.
2. Ditching.
3. Removal of refuse.

So far as labor was concerned, it would take 15,000 men. Of these, 7,500 laborers would be required, 2,500 more or less skilled; 4,000 mechanics; 1,000 American experts accustomed to engineering work. Mr. Wallace concluded with a pronounced reference to the importance of sanitation in the Canal zone, and he was emphatic in his remark that he was unwilling to start so vast an undertaking with the shadow of death as an advance guard for the work. The sanitation of the canal zone was in the hands of Col. Gorgas, and that its success will be due to his efforts and results. He impressed upon his audience and the men participating that this was as important as the canal itself.

We may be forgiven if we picture this man as an example of American virility. Strong in poise, in the prime of life, clear-headed as reason itself, with a forehead struggling in its presentation of artistic and logic attributes, clear grey eyes, a mouth strong and large, bounded by a firm lip and a chin broad and flexible.



Uttering no word to be recalled, full of exactness in every expression, knowing just what he wants to say and seeing just how far reason might take him, such is the man in whom the United States has and can put every trust.

"Give me the opportunity, money enough, and a free hand, and in ten years I will have ships going through from ocean to ocean," were, in substance, his only words expressing any opinion regarding the canal. He at no time was willing to speak of what was to be done. He at all times was free in saying what was being done.

A large audience showed appreciation of the several addresses and again the Panamanian band was in evidence. The air of the National Hymn followed us out of the National Theatre, where the sessions were held, and out towards home and the quaint road, the clear starlight, and the quiet old square, with the staring clock face in the old cathedral tower, sent thrills of speculation as to how much of history we were touching at this late hour.

It does not take much to learn that Panama City is dirty, wofully so. From the first streak of muddy streets when you leave the station until the straight road towards the cemetery this is ever patent. Our Panamanian friends know this, and that is why the next day they drove everyone out to the "Sabanias" for breakfast. "*Almuerzo*" sounds a so much better name for it when you are out where the palms tower above you and the fruit trees throw their protecting shade, where Nature compensates for ills by showering blessings of an ever fruitful soil. Twenty-five thousand dollars had been appropriated for this Congress, and in the lavish way this breakfast was planned and executed there was no attempt made to spare the funds. Pity of all things that enough had not been done to make the Congress better known beforehand, for these people did themselves proud.

#### SCIENTIFIC SESSION, JANUARY 4.

The first scientific session of the fourth Pan-American Medical Congress took place January 4 at 3 P. M. Owing to the comparatively small attendance, it was decided to combine all the sections and make one meeting of the whole. DR. R. H. CARTER was called to the chair, with the local Secretary, DR. JOSE CALVO, at his post.

The first paper read was by DR. JACOB FRANK of Chicago, on the "*Surgery of the Liver*." By means of large drawings, the doc-

tor demonstrated a plan for operating on the liver, such as for the removal of tumors, in such manner as to minimize the hemorrhage and obtain prompt healing. Instead of depending upon a tampon, as is usually done, his idea is to make a clean cut through the tissues and excising a V-shaped piece so as to form two flaps, which then can be accurately brought together by sutures. This is to be done in such manner as not to leave any open spaces. The sutures can be put in two rows, one deep and one more superficial, and the parts very accurately brought together.

DR. NICHOLAS SENN of Chicago opened the discussion. His objection was that the experiments of Dr. Frank were made in normal tissues, while in surgical work we have pathological conditions to contend against. We cannot do better than to imitate nature, which depends upon the formation of thrombi to stop hemorrhage. He would suggest to avoid making clean cuts and to use a blunt serrated knife. In operating on the spleen he has tried something of the sort with success, and found also that pressure forceps can be used to stop the hemorrhage temporarily. He considers the idea of cutting out a wedge in the tissue, as suggested by Dr. Frank, a very good one.

DR. G. W. CRILE of Cleveland said that the pith of the suggestion depended upon the fact that a small amount of pressure is sufficient to stop hemorrhage from the liver, as the blood pressure therein is low. He also considered the V or wedge-shaped cut a good idea.

DR. FRANK, in closing, stated that the reason he wished to avoid crushing the tissues, as would be done if Dr. Senn's suggestion were followed, is in order to obtain primary union. Results have not been obtained only in cadaveric work, as he has a letter from the Mayo Bros. stating that the plan had succeeded in cases of removal of the gall-bladder. He himself is now having a metallic instrument made by means of which he can make temporary pressure.

The next paper was read by DR. G. W. CRILE of Cleveland, on "*Surgical Physiology.*" The lesson to be derived from this paper is that greater attention should be paid to the study and observation of physiological phenomena that are apt to occur during surgical work so that they may be understood and that proper measures may be resorted to in order to prevent bad results.

The doctor used many of the phenomena apt to accompany the administration of anesthetics as illustrations, referring, for instance, to the danger of continuing the administration of a powerful anesthetic while dilation of the anal sphincter is being performed. This normally causing very deep inspirations, would lead to the absorption of an increasing quantity of the anesthetic, and, perhaps, lead to dangerous results.

DR. E. MARTINEZ of Havana, in discussing the paper referred to an operation for papilloma of the larynx by thyroidectomy which led to inhibition of respiration, although chloroform was soon stopped. Artificial respiration had been resorted to for some time and the operation had to be terminated intralaryngeally. Once he had a death from simply touching the larynx when trying to intubate. He never intubates now without first using cocaine.

DR. CRILE in closing referred to the cases of Dr. Martinez, and suggested that inverting the child and pressing on each side of the thorax, not only to make artificial respiration but to empty the auricles of blood and start circulation, would be useful.

A paper was then read by DR. LUCY WAITE of Chicago, on "*Some Gynecological Superstitions.*" Her paper was a plea for less frequent surgical operations in uterine conditions. She stated that statistics, referring to a large number of cases and examinations at the Women's Hospital in Chicago, showed clearly that malpositions of the uterus did not produce constipation as usually as is generally believed, that even retroversions rarely did so merely by pressure of the uterus. She also claimed that dysmenorrhea was rarely due to atresia of the uterine neck. She believes that operations on the ovaries and appendages are often performed without adequate benefit, and made a strong plea for their avoidance whenever possible, as patients frequently were either not benefited at all or were benefited only temporarily through the psychic effect of such operations.

DR. CRILE asked if Dr. Waite had found backache and leg-ache frequently associated with uterine conditions.

DR. WAITE in closing stated that those referred pains were due to metritis and peritonitis and not to malpositions alone.

DR. S. D. RISLEY of Philadelphia read a paper on "*Extraction of Cataract.*" This was especially a study of complications, particularly as relating to the prognosis in given cases.

## THE BANQUET.

At night the dining room of the Hotel Central had been transformed into a fairyland of Panamanian coloring. Fruits and flowers everywhere, and along the tables stretched from end to end of a long room were here and there artistic bits of *patisserie* in nougat, with isinglass windows and turrets, all with a Parisian touch which showed elaborate preparation. The banquet was in keeping with other functions. There were dignitaries of England, France, Mexico, other foreign states, our own Minister, Mr. Barrett, and by the side of the Panama President, Dr. Amador, sat the Bishop of Panama in his purple robes. Dainty oratory in the Spanish tongue from the President, and a few other addresses from the Consuls of France and England, and finally Mr. Barrett spoke for the United States, when the banqueting party adjourned to the hotel parlors, where, until a late hour, the strains of the Star Spangled Banner and the weird minor keys of the National Hymn spread out on the night.

## EXCURSION TO TOBAGO.

On Thursday morning, January 5, a most notable excursion was made to Tobago Island out in the Bay of Panama. Dr. and Mrs. Amador, an aggregation of the local committee, Drs. Calvo, Obarrio, Icaza, and again the band accompanied us. The day was fine, and the Steamboat "*Bolivar*" amply roomy for the party. Tobago has been used as a home for convalescents during the French administration, and when we were near enough to see the beauty, it looked a delightful home for anyone. Its fertile hillsides were covered at this season with pines, mangoes, bananas, coconuts and maize, the trees crowning the tops of the hills with luxuriant green. It was a relief to get away from Panama itself—where the streets reeked with odors and the houses looked like breeding spots of disease.

Large sympathy and a larger encouragement must be given our friends in Panama; Gorgas, Carter, Lagarde, Ross, Perry, Pierce, Lyster, Stansfield, may be names to conjure with, and they are doing good work, but they are only at the beginning, and where fault-finding creeps in it must be condoned, for Panama is a vaster problem than Havana was, for in Panama the good must



be done, nilly-willy, while in Havana, the means were at hand and the help available.

On the way home from Tobago everyone was joyous in the restful air of the tropical day. "Almuerzo" was served on board and a most gracious toast in soft Castilian was pledged to Panama and our hosts by Dr. Emilio Martinez of Havana, who spoke for the United States and her nepotized neighbor, Cuba.

#### SECOND SCIENTIFIC SESSION, AFTERNOON OF JANUARY 5.

DR. NICHOLAS SENN of Chicago delivered an address on "*Coxa Vara*," and showed photographs and radiographs illustrating the subject. He said that while the oldest case on record previously was aged 21 and the disease had always been considered as occurring particularly in the young, the case, photographs of which he exhibited and on which he founded his paper, was aged 42. It had run its course in three years, and it was already cured. What he had to deal with was simply the resulting deformity. He went at length into a differential diagnosis of the disease. There are no characteristic textural changes in the neck of the femur itself like those of rachitis. The premonitory symptoms are pain in the groin, radiating to the knee-joint and due to pressure. There is a lack of all evidence of infection and inflammation. There is no redness or elevation of temperature, and it varies in those respects from tubercular coxitis. Fracture of the neck of the femur may be mistaken for it, especially if it be impacted. It differs from senile coxitis also, as there is no rigidity in coxa vara like there is in the different forms of coxitis. The treatment consists of rest in bed during the acuteness of the attack, with the limb in a state of extension. There should be no hurry about interfering. The prognosis is favorable; the worst that can happen is that the patient may later require an orthopedic operation to correct the deformity. Trochanteric osteotomy or resection is indicated to correct the mechanical trouble after the disease has subsided.

DR. EMILIO MARTINEZ then read a paper by DR. CARLOS J. FINLAY of Havana. The paper reviewed the experiments made in Havana, which tended not only to demonstrate that yellow fever could be propagated by the *stegomyia* mosquito but that it could be transmitted only by such mosquito. Further evidence in up-

holding this idea is produced by the act that, while Havana has abandoned all precautions except such as led to the destruction of the mosquito and the protection of patients against the bites of the insect, the disease has been arrested in Cuba and there is no fear when cases are brought in. Patients suffering from yellow fever are brought among a large number of immigrants with impunity, the only precaution taken being to screen them properly.

DR. J. M. PURNELL, of Mississippi, in discussing the paper, congratulated Dr. Finlay on the results obtained, but expressed a doubt as to the mosquito alone propagating the disease. He was not satisfied as to the explanation of the occurrence of yellow fever at Ponte del Sol being due to the escape of one, or more mosquitoes from a ship which was anchored at some distance in the water, said mosquito being supposed to alight on some chips or other floating substances and carried to the shore. He thought the explanation too far fetched and that as long as instances of this kind occurred it could not be plain that the mosquito was the sole propagator of the disease.

DR. H. R. CARTER, now located at Panama, expressed his entire belief in the mosquito alone as the propagator of yellow fever. The successful efforts referred to by Dr. Purnell to arrest yellow fever in various locations did kill the mosquito (especially the sulphur), although they had not been directed against them. Both stegomyia and infected people are needed, of course, as well as non-immunes in order to have a spread of the disease.

DR. STERN of Panama thought that the mosquito could go about propagating the disease, but was not convinced that it was the sole means.

DR. COOK of Panama expressed the same opinion, and cited some isolated cases in support of his opinion.

DR. CHASSAIGNAC of New Orleans stated that there was no doubt in his opinion that the mosquito had been demonstrated as a propagator of yellow fever. He was very strongly impressed also by the evidence tending to show that the insect was the sole method of propagation, but he sympathized with those who were in the position of protectors of a large number of lives when they declined to drop all protective measures except those directed against mosquitoes. He had little doubt but that this would eventually be done, yet, as nothing human is infallible, and now and then apparently demonstrated theories have finally been found at fault,

it was wisest for sanitary authorities to move slowly and await the results of tests of more prolonged duration. At the proper time he would propose a resolution relating to this matter.

DR. W. L. HUGHES of St. Louis stated that while the mosquito is no doubt the usual carrier of the infection, he is not convinced that it is the only one.

DR. CARTER again referred to the negative evidence about infection by fomites. All disinfection of fomites has been omitted for some time at Havana, also of baggage and merchandise from Vera Cruz, Progreso and Tampico, which are all more or less infected at various times, and yet this has led to no infection at Havana.

DR. W. C. GORGAS, who is now at the head of the sanitary work on the Isthmus, described how he and most others in Havana at the time that Dr. Finlay first broached his mosquito theory doubted its correctness and were inclined to believe that in considering it the profession would be making itself a laughing stock. Then being led to look further into the subject certain occurrences, finally convinced him that the mosquito could convey the disease. Continued experience, especially after the destruction of mosquitoes and protection against their bite were the only measures resorted to, and that successfully, finally convinced him that the mosquito was the only propagator of the disease.

DR. J. N. THOMAS of Louisiana asked in what strength was pyrethrum being used on the Isthmus to kill the mosquito.

DR. BALCH, of the sanitary staff, answered that two pounds to 1,000 cubic feet was being used. That one pound only stunned them but did not kill, and also that the pyrethrum must be of good quality.

DR. THOMAS stated that in 1903 he had used pyrethrum extensively in fruit ships and found that it did not kill the mosquito, that it only stunned them and they would come to life again as soon as they could get some oxygen. He found that small quantities of sulphur were sufficient. He mentioned that in the port of Santos in Brazil yellow fever had been arrested a few years ago when new docks were built without any attempt being made to kill the mosquito.

DR. ECHEVERRIA of Costa Rica stated that there never was yellow fever where there were no stegomyia. In many places cases of yellow fever had been brought, but that as there were no stegomyia no yellow fever had developed.

DR. MARTINEZ, in closing for Dr. Finlay, claimed that the evolution of the yellow fever germ in the mosquito, *i.e.* ten to twelve days of incubation, would tend to show that it is the intermediate host. Referring to Santos, he claimed that cleaning a city usually meant killing mosquitoes, also that the sanitation at Rio Janeiro would have something to do with it as destroying the center of infection, just as destroying the infection in Havana had been useful for all Cuba. He referred to the careful experiments that had been made at Havana in the attempt to convey yellow fever through fomites, and the result, which was always negative. The results which were obtained at Havana, where all attention was directed to the mosquito, in his opinion are a proof of the correctness of the theory. He saw a patient with yellow fever on a wharf among 1,500 immigrants who were non-immunes, and, although the only precaution resorted to was the screening of this patient, not one of the immigrants contracted the disease.

At the close of the session DR. CHASSAIGNAC introduced a resolution whose preamble was that inasmuch as the mosquito was not only the cause of a great deal of annoyance and suffering, but was also the propagator of diseases which could be in part, if not completely, arrested by the destruction of the mosquito, we earnestly urged all governments and municipalities to do everything in their power to destroy and finally annihilate this pestiferous insect. The resolution was unanimously adopted.

#### AT NIGHT THE BALL.

The International Club threw everything wide open. Spanish duennas, señoritas of all types and ages, Panama blades and soft music tuned the Terpsichorean movement, and from the first quadrille until the wee sma' hours the dance went on. Mrs. Amador presided. Her Andalusian beauty has not waned, and the honors of her state have in nowise dimmed her natural graciousness, which a beautiful smile and sparkling eyes only accentuate, when her soft Spanish greeting bids the time of night or day. A sumptuous supper was spread, and here, as everywhere, a Latin hospitality was *en regle*.

Friday we went to Culebra, the "*pons asinorum*" of the Panama Canal. It was indeed a privilege to make this excursion under the guidance of Mr. Wallace himself. There were about 300 men



working at Culebra. Two steel ploughs were at work, and so much, at least, was being accomplished towards a large end. We saw the whole of the cut, and it was sad to see the mass of rusting engines, cars, machinery, left everywhere in the reckless waste and worry of the French regime.

On our way back we stopped at Empire, with the marines, whom Uncle Sam has placed half way in the zone, on the top of the hill, ready for any emergency and with such sanitary conditions prevailing that the health has been proverbially good. The officers gave us a most acceptable lunch and were as glad to have us as we were glad to have their hospitality.

THE CLOSING SESSION OF THE CONGRESS TOOK PLACE ON THE EVENING OF JANUARY 6, as it had been delayed on account of the expected arrival of the delegation which had sailed from Baltimore and had failed to arrive in time. The local President, DR. JULIO ICAZA, welcomed the recent arrivals and called upon the representatives of the various governments to deliver short allocutions.

DR. MARTINEZ of Havana spoke as the representative of the republic of Cuba.

DR. W. W. KEENE of Philadelphia spoke for the United States, referring to the importance that Panama would attain through the building of the canal.

DR. RAMOS read the address of Dr. Liceaga, the official representative of the Republic of Mexico.

DR. AZURDIA spoke as the representative of Guatemala.

DR. HUGO BIFFI spoke for Peru.

DR. CORDOVA was the mouth piece for the Republic of Honduras.

DR. ECHEVERRIA spoke for Costa Rico.

After the various official allocutions had been delivered, all of them in Spanish except Dr. Keen's, DR. HUGHES of St. Louis spoke on the "*Care and Cure of Epilepsy.*" He stated that all cases should not be considered as hopeless, that a possible radical cure should be entertained in many cases. During an experience of forty-five years he could now refer to at least ten cases which have been cured and have remained without recurrence during twenty-five years. Treatment must last at least two years. Attention to the digestive apparatus, the stomach as well as intestines,

is important. Regular sleep must be secured for the patient every night through bromide or other mild hypnotics. All conditions, whether medical or surgical, which are at all abnormal must be corrected, and success can be obtained if all this is done systematically and regularly during a sufficient length of time, particularly if it be done in an institution properly prepared for the treatment of these cases.

DR. McDONALD, after referring humorously to the trials and tribulations as well as delay of the party which had sailed from Baltimore on the S.S. *Athos*, and which had arrived in Panama only after the Congress was about over, moved that the papers which had been read on board the steamer by members of the party should be incorporated as having been read at the Congress.

In discussing this motion the point was made that this would be irregular and a bad precedent; the proper way to include these papers being to have them read by title and referred for publication in the Transactions. Dr. McDonald objected to this view of the matter, as it would lead to the omission of the discussion of the papers, which he considered of considerable value. Upon a motion being put, it was carried by a vote of 16 to 7, all the Spanish-speaking members of the Congress not voting, as the motion and discussion has been in English and was not translated for their benefit.

DR. BIFFI of Peru then read a paper on "*The Study of Various Filters as to Their Permeability to Protozoa.*" This related valuable experiments in water filtration and regarding the safety of various kinds of filters.

DR. RAMOS of Mexico then read a paper on "*Bubonic Plague,*" referring to the epidemic in San Francisco and to the evils of the failure of prompt report of cases. The address also included many interesting points in the sanitary work necessary to arrest diseases.

This was the last regular session of the Congress and a large number of the delegates left Panama the next morning. A short extra session was held, however, in the forenoon of January 7, which was followed by a meeting of the International Executive Committee, at which it was decided to hold the next Congress in three years at Guatemala City, the capital of the Republic of Guatemala. Some objection was made on account of the relative





Opening Session American Public Health Association, Havana, January, 1905.





inaccessibility of the place, as it is situated on the Pacific side, but this was met by the statement that the city by that time would be accessible from the Atlantic side through Port Barrios, from which a railroad was being built to Guatemala City, now lacking only eighteen miles for its completion. Also that, in all probability, the railroad from Mexico would be completed by that time, thus making possible even an all-rail route to the place of meeting.

---

### **American Public Health Association.**

PROCEEDINGS OF THE THIRTY-SECOND ANNUAL MEETING, HELD  
AT HAVANA, CUBA, JAN. 9, 10, 11, 12 AND 13, 1905.

The association met at the Athenaeum Club, under the presidency of Dr. Carlos J. Finlay, of Havana.

Following the transaction of routine business, election of over a hundred new members, etc., the reading of papers was begun.

PURIFICATION OF THE ST. LOUIS WATER SUPPLY BY USING FERROUS SULPHATE AND CALCIUM HYDROXIDE AS A COAGULANT, FOLLOWED BY PLAIN SEDIMENTATION.—This paper was read by DR. C. A. SNODGRASS, of St. Louis, Mo., and was of particular interest, for the reason that it set forth a simple, practical and inexpensive method of handling large quantities of water. It called attention to the fact that from the year 1832, the time at which the first water works system of St. Louis was installed, until 1904, the water supply of St. Louis had been unsatisfactory, and that in a few months' time a complete transformation of the quality of the water had been secured. The comparative cost with other proposed methods was most striking. One of the proposed methods called for an original outlay of \$31,000,000; another \$2,700,000, while the present plant required only \$10,000 for its construction. This plan of operation was showed to cost \$4.50 less per million gallons than any other proposed plan.

The exact and extensive chemical and bacteriological data added to the physical properties proved conclusively that a water of a high degree of potability was being secured. The removal of suspended matter was shown to average 96.9 per cent., whilst the bacterial removal average 95 per cent, in many weekly analyses showing an efficiency of 99 per cent. Mineral analysis showed that there was nothing left in the water that could be inimical to health.

Death rate from typhoid fever during the last year had been materially lowered, but owing to the limited time of operation of the present system, no deductions from this point of view were insisted on. Reports from engineers and manufacturers showed that the treatment given the St. Louis water supply was highly satisfactory to their interests. It was the opinion of the writer that little or nothing would be gained by adding mechanical filtration to this system.

Attention was called to the difficulties which were unavoidable in the institution of this plan into the previously existing plant, and it was claimed that with contemplated changes of a minor character the expense of operation would still be lowered and the efficiency increased.

**COPPER SULPHATE METHOD FOR REMOVAL OF GERMS FROM WATER.**—MR. F. S. HOLLIS, of New Haven, Conn., contributed a paper in which he described a practical test of the copper sulphate method for the removal of germs from water supplies.

MR. GEO. W. FULLER, of New York, presented the *Report of the Committee on Purification and Preservation of Water Supplies*. He stated that the principle of the use of sulphate of copper in treating water supplies was not a new one, as it had been used for thousands of years.

With reference to filtration, he said the number of cities in the United States, with a population of 25,000, now using the filtration plan, was about 8 per cent, those which had filters under construction, 11 per cent, those in which filters had been authorized, 20 per cent, and those in which filters were being considered as necessary, 31 per cent. Statistics and arguments were advanced in favor of filtration as a method of purifying water supplies of cities.

DR. FRANK WARNER, of Columbus, Ohio, stated that in considering the improvement of any public water supply, more attention should be given to the better protection of the watershed. This feature was either neglected or overlooked in connection with modern purification plants. This was especially true of pollution near the purification works, and the water should be delivered to the purification plant in as pure condition as possible before purification.

MR. H. W. CLARK, of Boston, said that since the introduction of

filtration at Lawrence, Mass., the city had increased in population from 45,000 to 75,000, and the percentage of deaths from typhoid fever had been materially reduced.

MR. ROBERT S. WESTON, of Boston, stated that other questions of purification of water must be settled before any one method could be universally used.

DISINFECTION AND DISINFECTANTS.—At the afternoon session the *report of the Committee on Disinfection and Disinfectants* was read by PROF. F. C. ROBINSON, of Brunswick, Maine. The report was a review of the more important literature on the subject during the past year, especially in the foreign journals. As to experiments on disinfecting railway cars by formaldehyde, the results showed that in case of passenger cars it was practically impossible to completely sterilize all parts by the vapor of formalin, but still the experimenters think that it is the most practical thing to employ for that purpose. They recommend 1,000 c.c. of the liquid formalin to each car, but of course the cars are much smaller than those in use in the United States.

As to chemical methods for sterilizing drinking water, V. B. NESFIELD recommends the use of tablets made from one and one-half grains of bleaching powder and one-half grain sodium bicarbonate. He claims that these will each sterilize a pint of water in five minutes, or better, ten. He removes the taste of chlorin by adding a tablet of sodium sulphite. He claims that by such use the most foul river water can be made free from disease germs and palatable.

With regard to the disinfection of books, the report called attention to the danger of the spread of infectious diseases through library and school books. It was recommended that the danger should be met as far as possible by notices in libraries calling attention to the advisability of handling books with clean hands, of not touching the hands to the mouth after handling books until the hands are washed, and in addition submitting books much used to the action of formaldehyde vapor once in a while.

Remarkable results had followed the occasional use of weak solutions of formaldehyde on the floors of school houses—solutions so weak that they gave no disagreeable odor. Infectious colds and other dust-borne diseases were much lessened among the scholars. The committee believes that the occasional use of such solutions

on floors and surfaces in dwelling houses as well as public buildings would do a great deal towards improving public health.

THE USE OF SULPHATE OF COPPER ALONE OR IN COMBINATION WITH LIME FOR THE DESTRUCTION OF MOSQUITO LARVAE AS A DEODORANT AND AS A DISINFECTANT.

DR. A. H. DOTY, of New York, contributed a paper with this title. The author's investigation embraced the following points: First, the use of copper alone or in combination with lime for the destruction of mosquito larvae; second, as a deodorant, and third, as a disinfectant.

In summing up as to the value of copper alone and in combination with lime, as the result of his experimental work, he stated that in the destruction of mosquito larvae and as a deodorant, the use of copper in combination with lime was more effective than when used alone. That this mixture destroyed mosquito larvae by rapidly removing from the water in which they were contained the organic matter or nourishment upon which they depended for life, and that this result was not due to a toxic effect produced by the copper or lime. Therefore, the range of usefulness of these agents either alone or in combination in the destruction of mosquito larvae was limited.

As to copper and lime as a deodorant, he believed it to be the most valuable and practical agent we possessed at present for this purpose. Its action as a deodorant was rapid and permanent. It was practically harmless, cheap and easily made, and seemed to comply with the requirements of a typical deodorant. Its range of usefulness was extensive, as it could be employed equally well for deodorizing solids or fluids. Little could be said regarding the germicidal value of copper at the present time.

THE DISINFECTION OF SCHOOL BOOKS.—DR. WALTER D. GREENE, of Buffalo, N. Y., stated that the examination of the public school books early in 1902 revealed the fact that they were filthy, especially those used by the lower grades. These books were furnished gratuitously by the city, and consequently there existed a tendency to use them until they were literally in pieces—a period covering several years. It was thought that these filthy books, worn and handled by so many diminutive individuals, might be, and probably were, a possible source of contagion, and it was decided to disinfect them. The books were placed on their edges with covers



widely separated upon tables and shelves in tightly sealed rooms. Formaldehyde gas was liberated in the room, six ounces of a comparatively fresh commercial formalin being used for every thousand cubic feet of air space, the vaporization being induced by the use of wood alcohol being burnt in a receptacle containing the formalin. Bacteriological examinations were made of the soiled leaves of books both before and after disinfection, and it was found that about 85 per cent of all organisms were killed. For the three years immediately preceding this school book disinfection—that is 1899, 1900 and 1901—the average number of cases of scarlet fever reported to the health department by physicians in Buffalo was 875 yearly, while the average yearly deaths for the same time was thirty-six. For the three years following such disinfection, the average number of cases reported yearly was 528, and the number of deaths yearly for the same time was eighteen. He hoped the results of these investigations would stimulate health boards and health officers to disinfect the school books of their respective municipalities.

THE SOURCES OF INFECTION.—Dr. Charles V. Chapin, of Providence, R. I., after pointing out various sources of infection, directed attention to isolation and disinfection. He said that it was perfectly plain, if we could isolate every case of a given contagious disease until all infection had disappeared, the disease would not merely decrease, but it would be exterminated. If we could only control one-half, one-quarter, or one-tenth of the foci of infection, it was equally clear that the disease would never be exterminated, and it was not even certain that it would diminish. The relation of probable success to the efforts made must decide the extent of those efforts. It was the writer's opinion that for most of the diseases, and for most localities, restrictive measures were either carried too far, or were not carried far enough.

THE ACTUAL SANITARY CONDITIONS OF HAVANA AND THE FURTHER REQUIREMENTS FOR THEIR IMPROVEMENT.—DR. ERASTUS WILSON, of Havana, said that the prevailing annual mortality in the city of Havana previous to American intervention—1898-1902—approximated forty per thousand. The general cleaning up of public places and rigid house to house inspection and abatement of unsanitary domestic conditions, together with filling the puddle holes and irregularities in the macadamized streets, with the pro-

hibiting of the ejection of domestic wastes into the by-ways, obtained immediate and notable reduction in the mortality rate in the city. The continuation of the sanitary measures introduced by that intervention and the continued improvements of the pavements of streets had reduced the type of mortality and morbidity to about 50 per cent of its former rate, besides beautifying the city and making it infinitely more attractive for residents who were interested in health and general culture.

The author called attention to a further requirement of sanitary science, which was radical and indispensable, namely, a modern system of sewers of proper section, regularly graduated in size and declivity from their incipience to outfall, impermeable throughout and connected with the closets of every house by lead-jointed, cast iron pipes, uniting them to the sewer outside the domicile.

RESOLUTIONS ON HAVANA SANITARY CONDITIONS, following Dr. Wilson's paper, this resolution was offered and adopted:

"Resolved, That the Association congratulates the civic authorities, the physicians, and the people of Havana in general upon the gratifying improvement made in its sanitary condition, and especially upon their work in freeing their beautiful city from any danger from that once dreaded scourge—yellow fever—by their persistent and skillful campaign against the yellow fever mosquito. We are especially gratified also that they do not propose to rest contented with what has been done, great as it is, but have already planned other sanitary improvements of great importance, including an efficient system of sewerage, which we wish them Godspeed in carrying out at the earliest practicable moment."

ADDRESSES OF WELCOME were delivered by DR. CANCIO, Secretary of Public Instruction to President Palma, representing the Cuban government, and by DR. LINCOLN DE ZAYAS, representing the medical profession of Havana.

PRESIDENT'S ADDRESS.—The President, DR. CARLOS J. FINLAY, after thanking the Association for the great honor that had been conferred upon him in electing him President, referred to the first Havana yellow fever commission, which was established a quarter of a century ago, and came from Washington to prepare the ground upon which a common enemy would be subsequently challenged and decisive battles fought. This enemy was the yellow fever.

So well did this commission accomplish its object, that he could readily trace back to its immediate influence the discoveries which led the way to ultimate success.

After referring to the deaths of several prominent members that had occurred during the year, he stated that the sanitary experience in Cuba during the last twelve months, both with regard to yellow fever and to smallpox, had been somewhat more eventful and at the same time more instructive than in the preceding two years. In the district of Havana, notwithstanding the admission of imported cases of yellow fever from foreign ports, not a single case, originating on the island, had been recorded. With the experimental proofs that they now possess that fomites *per se* were incapable of transmitting the disease, the inevitable conclusion must be that in the cases he mentioned infected mosquitos had been conveyed upon floating bodies by the ebb tide.

The fight against tuberculosis must be maintained at all costs, as the most important factor in mortuary statistics of large towns, almost all over the world.

The study of causes and prevention of infant mortality was one which affected Cuba not only with reference to infantile enteritis, but also with regard to tetanus neonatorum, the occurrence of which was coupled with unpardonable ignorance or neglect both on the part of parents and of the attendants at the birth of children.

The control of milk supplies in large cities was closely connected with infantile mortality, for the methods best calculated to carry the former into effect should undoubtedly lessen the latter.

Finally, the subject of sanitary agreement between adjoining nations had become of paramount importance since the recent advance made in our knowledge of the etiology of certain quarantinable diseases, of yellow fever in particular. Hence the advisability that European nations holding possessions in the American yellow fever zone be represented at the meetings of the Association.

DR. BENJAMIN LEE, of Philadelphia, read *a tribute to* Dr. Carlos J. Finlay for his distinguished services to science and humanity in the discovery of the mode of propagation of yellow fever.

BACILLUS TUBERCULOSIS IN MAN AND ANIMALS.—In the absence of Dr. M. P. Ravenel, chairman of this committee, the report was read by DR. V. C. MOORE.

Since the last meeting several important pieces of work had been

reported. These were detailed in the report. The committee carefully compared the disease set up in the bovine animal by material of bovine origin, and so far it had found the one, both in its broad general features and in its wider histological details, to be identical with the other. It had so far failed to discover any character by which it could distinguish one from the other, and its records contained accounts of the post-mortem examinations of bovine animals infected with tuberculosis material of human origin which might be used as typical descriptions of ordinary bovine tuberculosis.

At the laboratory of the State Live Stock Sanitary Board of Pennsylvania a third instance of infection with the bovine bacillus had been found. The case was that of a child not quite two years old, who had been nourished the greater part of its short life on cow's milk, bought from the most convenient store. It developed a large abdominal tumor, which proved on autopsy to be a tuberculous new growth, involving the mesentric glands and intestine. The lungs were not involved. Cultures were obtained from this tumor, which had the cultural and microscopic characteristics of the bovine bacillus, and proved fatal to a calf weighing 211 pounds, in thirty-five days.

The committee did not yet feel able to say with what frequency bovine infection of man took place, but it was evidently not a rare occurrence. The committee considered that the evidence going to show that such infection did take place was absolutely conclusive, and that it not only justified, but made imperative, the passage of stringent laws by municipal and State authorities for the suppression of tuberculosis in cattle, and the prohibition of the sale of meat and milk from tuberculous animals.

THE REPORT OF THE COMMITTEE ON TUBERCULOSIS was read by the secretary. The practical measures recommended years ago had since been tested in part, and so far as tested had been found of use. These recommendations were:

"1. The notification to and registration by health authorities of all cases of tuberculosis which have arrived at the infectious stage.

"2. The thorough disinfection of all houses in which tuberculosis has occurred, and the recording of such action in an open record.



"3. The establishment of special hospitals for the treatment of tuberculosis.

"4. The organization of societies for the prevention of tuberculosis.

"5. Government inspection of dairies and slaughter houses and the extermination of tuberculosis among dairy cattle.

"6. Appropriate legislation against spitting into places where the sputum is likely to infect others and against the sale or donation of objects which have been in use by consumptives unless they have been thoroughly disinfected.

"7. Compulsory disinfection of hotel rooms, sleeping car berths and steamer cabins which have been occupied by consumptives before other persons are allowed to occupy them."

In addition to the specific recommendations here given, the committee urged upon the public the importance of better housing of the poor in their places of abode and in their places of occupation; better control of the food supply at large and more definite instructions in the schools and on the platform of diet for the working people. The home and workshop were really the centers from which the disease was distributed, and they at the same time were strong predisposing causes of the disease by reason of their unhealthiness. Bad and adulterated food and improper selection of food by the individual were also strong predisposing causes by lowering vitality. The committee suggested that every member act as a committee of one in his own home to help organize a campaign against this disease.

DR. WALTER D. GREENE, of Buffalo, N. Y., said that tuberculosis was a subject of vital interest, inasmuch as one-tenth of all deaths occurred from this disease. There were two things of special interest in combatting the disease, one of which was notification of cases, and the other thorough disinfection of houses in which the disease had occurred. In the city of Buffalo every house in which a case of tuberculosis had developed was thoroughly disinfected. This had been the practice in that city for the last five years. A card index was of vital importance in keeping track of cases of the disease. The people should be educated in regard to the prevention and control of the disease. Pamphlets giving directions how to keep from getting the disease were printed in Buffalo in the German, English, Polish and Italian languages. Directions

were also given as to what to do when people contracted the disease.

DR. FRANK WARNER, of Columbus, Ohio, said the reporting of cases of tuberculosis was an important factor in the prevention of the disease, but it was only the first step. This should be followed with literature placed in the hands of families in which the disease had developed. Information regarding the disease should also be published and put into the hands of men working in stores and shops. Articles relating to the disease should be published in the daily newspapers for the edification of the public. He pointed out the importance of educating the people through the press and other agencies. The disinfection of houses after deaths had occurred was of great importance in order to destroy the germs of the disease. Testing for tuberculosis in cattle by tuberculin had proven a very important thing. At the Ohio State University there was an agricultural and dairy department, so that every cow was constantly tested with tuberculin for tuberculosis, and whenever the disease was found in a cow, that animal was withdrawn from the herd.

DR. R. H. LEWIS, of Raleigh, N. C., endorsed the position taken by the previous speaker. In his State pamphlets concerning the disease and its prevention were placed in the hands of superintendents of public instruction and of school teachers for distribution. The active co-operation of the family doctor should be enlisted.

DR. MARCUS HAAS, of Memphis, Tenn., agreed with the speakers in regard to educating the public as to the prevention and control of the disease. Negroes in the South were more susceptible to the disease than the whites. He referred to the thorough system of dairy and milk inspection in Memphis, saying that gratifying results had been obtained by it.

DR. W. C. CHAPMAN, of Toledo, Ohio, said that sanitarians should not demand too much of the physician, for in doing so they would undo the benefit which they might otherwise receive. Physicians were reluctant in reporting cases of tuberculosis to city health departments, on account of the protests of families in which the disease had developed.

DR. MANUEL S. IGLESIA, of Vera Cruz, Mexico, described the present hygienic conditions of that city, and expressed the hope that at no distant day this port would be one of the healthiest to be found.

DR. ARISTIDES AGRAMONTE, of Havana, pointed out in an interesting and scholarly paper the practical utility of a medical board to aid local sanitary authorities in the investigation of infectious diseases.

DIPHTHERIA INFECTION IN MINNESOTA, ESPECIALLY IN SCHOOL CHILDREN, AND INSTITUTIONAL EPIDEMICS.—DR. F. F. WESBROOK, of Minneapolis, stated that in the work of the Minnesota State Board of Health the problems had naturally arranged themselves into three main groups: First, the work of dealing with diphtheria as it occurred in family life, where one or more cases appeared in a household. Second, where infection was widespread and the day schools had to be closed. Third, where infection gained entrance into institutions in which children or other inmates were housed, employed, taught or confined, and where great opportunity for the spread of infection was present.

In summing up the work he said it was apparent, (1) that an adequate laboratory staff and equipment were essential since only by thorough laboratory examination could the presence of possible danger be determined. (2). It had been found convenient to utilize institutional laboratories when available, as the members of the laboratory staff of the State Board of Health could examine cultures on the spot when there was urgent need of haste. (3). The repetition of examination of both nose and throat specimens was advisable in all cases, and especially when suspicious bacilli were found. (4). Every effort should be made to prevent the exchange of nose and throat bacteria between individuals until it was definitely known whether they were infected or not. In infected individuals the bacilli would be eliminated more quickly the greater the approximation to individual isolation. (5). It was unsafe to place hitherto uninfected individuals who developed sore throat with clinical cases of diphtheria. (6). Executive action must be taken on the basis afforded by the laboratory; therefore it was essential that these two branches be kept in the closest touch, or that in the work of inauguration and supervision of methods a laboratory trained man be placed in charge. (7). That such methods give satisfactory results and were entirely practicable, had been shown in the experience of the Minnesota State Board of Health under conditions which presented the greatest possible variation. Three epidemics had thus been suppressed in a lying-in



hospital in Minneapolis where there was no adequate nursing force, where the women before and after confinement were employed in the housework of the institution, where the babies were left in charge of different mothers at different times, and where also the almost daily admission of fresh inmates added to the opportunities for the introduction of infection. (8). The experience of Minnesota would seem to point decidedly to the conclusion that diphtheria infection is transmitted usually by almost direct exchange of flora of the nose and throat. (9). In institutional and school life the more independent the individual and the greater the facilities for individual infection, the greater the freedom from diphtheria infection.

DR. SAMUEL H. DURGIN, of Boston, followed with the report of the committee on the infectious period of communicable diseases.

SOCIAL HYGIENE—DR. ADOLPHE OLIVA, of Guadalajara, Mexico, read a paper on this subject, in which he pointed out the effects of dress on the system. He also discussed the various forms of dress. He said that variations in temperature of the system with the climate, seasons, age, constitution, and the conditions of health or of disease fully demonstrated the physiological necessity of dress.

YELLOW FEVER—DR. E. LICEAGA, of Mexico, read a paper on this subject, in which, with the aid of numerous charts and diagrams, he described how houses that were infected with the disease were disinfected. As soon as a case of yellow fever was found, the patient was isolated, the mosquitoes and larvae were destroyed. The Vera Cruz campaign against yellow fever had been very successful, in that there had not been any epidemic of the disease in that city for the last six months. He cited one case to prove, without doubt, that yellow fever was transmitted by mosquitoes alone.

CONTROL OF THE MILK SUPPLY IN LARGE CITIES—DR. WM. H. PARK, of New York City, Chairman of a committee, read a report on this subject. The topic was divided under three heads: (1). The proper conditions at the farms. (2) Proper conditions during the transportation of milk, and (3) proper conditions at the delivery station and in the case of milk in the homes.

Until recently the conditions at the farms had been largely overlooked by the health officers of great cities, on account of the practical difficulties and the expense. The Milk Commission appointed



by the Medical Society of the County of New York had undertaken to assist both the consumer and producer by fixing a standard of cleanliness and quality to which it could certify, and by giving information concerning measures needful for obtaining that degree of purity. The most practical standard for the estimation of cleanliness in the handling and care of milk was its relative freedom from germs or bacteria. Milk must not be sold as certified more than twenty-four hours after its arrival in New York.

The report discussed the duties and requirements of dealers in milk, the barnyard, the stable, the condition of the cows, the milkers, helpers other than milkers, small animals, the milk itself, the utensils for holding milk, as well as the examination of the milk and dairy inspection.

DR. GONZALO AROSTEGUI, of Havana, discussed the importance of good quality and careful distribution of the milk supply.

INFANTILE FEEDING BY NURSES—DR. ALFONSO PRUNEDA, of Mexico, read a paper on this subject, and said it was necessary always to advocate the need of maternal lactation, which was really adequate from every possible point of view, but in the event of this being found impossible, we should not hesitate to adopt some other methods, and especially should we avoid the employment of wet nurses who, as the writer pointed out, presented many objections, but rather make use of sterilized milk, which, when properly and methodically used, would fulfill its purpose, and thus save the lives of many children who would, under other conditions, perish and increase the infant death rate.

PRODUCTION OF ANIMAL VACCINE—DR. W. F. ELGIN, of Glendon, Pa., followed with a paper, in which he described experiments and his experience in the production of animal vaccine. The author pointed out (1) that virus exposed to cold below zero C. might remain active for an indefinite period, certainly for several years. (2) That when it was removed from cold storage, it would retain its activity for a considerable period under conditions that usually obtained commercially. (3) That when glycerinated lymph was exposed to zero C. or below, the destruction of germ life through the action of the glycerine was practically at a standstill. (4) The rapidity of the elimination of the contained bacteria depended upon the temperature above 10 degrees C., in which the virus was stored.

The writer showed that the life of the average commercial vac-

cine was only three months in winter, and in August and September only about one month. Two lessons might be learned from this: First, one should not vaccinate in the summer season unless compelled to do by the presence of smallpox. Second, when compelled to vaccinate at this season, one should order direct from the laboratory of the vaccine, and use it at once without regard to the dating of the package.

After discussing the forms of preparing vaccine, the author stated that dried vaccine in any form was short-lived, and not near so reliable as the glycerinated form. The most active virus was to be obtained from the deep curretting.

DR. F. P. BERNALDEZ, of Mexico, cited facts and arguments which tended to demonstrate the superiority of humanized over animal vaccine for the prevention of smallpox. He claimed that persons who were vaccinated and revaccinated with humanized lymph enjoyed a longer immunity, according to his observations, and in Mexico he had never seen a case so vaccinated attacked by smallpox.

DR. VINCENTE DE LA GUARDIA, of Havana, spoke of the necessity of vaccination and revaccination of individuals who had suffered from smallpox. He said that in most countries nowadays there was no vaccination requirement for individuals who had had smallpox. He had had the opportunity of vaccinating and revaccinating 1,599 persons, members of the police department, custom house inspectors, port policemen, persons confined in jails, males and females, etc. Of this number, 328 were branded with the smallpox trademark, and of 47 of whom were vaccinated for the first time in their lives, 17 were successful in taking. Two hundred and sixty-three were revaccinated, in 48 of whom it took successfully, giving a total of 65 successful vaccinations. The total result of the 328 who had had smallpox previously corresponded approximately to over 20 per cent of the total figures. The author concluded by insisting that, as a general rule, all individuals, whether they be ex-victims of smallpox or not, should be vaccinated or revaccinated, as the case might be.

STEGOMYIA FASCIATA—DR. FERNANDO LOPES, of Mexico, detailed some experimental studies on the acclimatization of this pest. The experiments seemed to prove that the *stegomyia fasciata* could live, bite, and breed for, at least three generations in Mexico City, notwithstanding the fact that this city had an altitude of more than 7,300 feet above the sea level.

OFFICERS.—The following officers were elected for the ensuing year :

President, DR. F. F. WESBROOK, Minneapolis, Minnesota.

First Vice-President, DR. JUAN GUITERAS, Havana, Cuba.

Second Vice-President, DR. F. LOPEZ, Mexico City, Mexico.

Third Vice-President, DR. GEO. MACDONALD, Brandon, Manitoba.

Executive Council, Drs. Marcus Haas, Memphis, Tenn.; C. V. Chapin, Providence, R. I., and Wm. C. Chapman, Toledo, Ohio.

Secretary, Dr. Chas. O. Probst, Columbus, Ohio, re-elected.

Treasurer, Dr. Frank W. Wright, New Haven, Conn., re-elected.

After the introduction and adoption of resolutions of thanks to the local Committee of Arrangements, the President of the Republic of Cuba and the Minister of the United States, for the receptions so graciously given in honor of the members, the Association, on motion, adjourned to meet in the City of Boston, Massachusetts, 1905.

---

### Meeting of the Laboratory Section of the American Public Health Association.

The meeting of this section was held at the General Wood Laboratory, Havana, Cuba, January 9, 1905, under the chairmanship of Dr. V. A. Moore, of Ithaca, N. Y. The meeting was devoted very largely to water and sewerage.

MR. GEORGE W. FULLER, of New York, Chairman of the Committee on "*Standard Methods of Water Analysis*," submitted an exhaustive report on the changes and improvements in the methods that are being used in bacteriological tests of water. The report was ordered to be distributed to bacteriologists both in this country and in Europe.

Reports of committees on a variety of technical subjects and several papers on bacteriological topics were read.

THE PERSISTENCE OF AGGLUTINABILITY IN TYPHOID BACILLI IN WATER—PROF. EDWIN O. JORDAN, of Chicago, contributed a paper on this subject. Both the theoretical and practical problems involved by either a positive or negative result from experiments upon the agglutinability of typhoid bacilli in water were of considerable interest and importance. This work had dealt chiefly with two aspects, that of the separation of *bacillus typhosus* and *bacillus coli*



from mixtures of various ages in both tap water and previously sterilized sewage, and also the persistence of the agglutinability of the former after association with the latter for similar periods.

The conclusions drawn were (1) that the typhoid bacillus may be isolated without special difficulty after association with bacillus coli in tap water and sewage for from at least twelve to twenty days. (2) That some strains of bacillus typhosus retain their property of agglutinability absolutely intact under these conditions.

**A CAUSE OF THE FORMATION OF GAS IN CANS OF CONDENSED MILK**—MR. CHAS. W. DODGE, of Rochester, N. Y., stated that bacteriological investigations of the condensed milk in cans, which were found to bulge shortly after their preparation, failed to find any micro-organisms which, either singly or in combination, would cause the fermentation of either dextrose or lactose under a variety of conditions usually favorably to such fermentations. Neither would the milk itself from such cans cause fermentation in fresh milk. It was found, however, that when dilute solutions of butyric or lactic acid, varying from 1-200 to 1-500 in distilled water, were allowed to act upon the metal of which the cans were made, a slow evolution of gas took place, its rapidity being inversely as the dilution of the acid. It was probable that in the instance cited the gas was formed not by the bacteria directly, but the electrolytic action between the metal of which the cans were composed and the acids generated by the growth of bacteria in the milk before the latter was condensed.

**AN UNUSUAL CHANNEL OF INFECTION WITH THE BACILLUS SHIGA**.—MR. DODGE stated that a laboratory worker accidentally broke a test tube containing a culture of the Shiga bacillus, and some of the fluid was carried to his eye and was probably washed down into the pharynx. Twenty-four hours later typical clinical symptoms of acute dysentery appeared, and lasted for several days. This occurrence of the accident and the infection might be merely a coincidence, but, if not, the occurrence threw light on the rapidity of infection in dysentery in man.

**AN IMPROVEMENT IN THE TECHNIQUE OF THE INDOL TEST**—DR. JOSEPH MCFARLAND, and DR. J. HAMILTON SMALL, of Philadelphia, contributed a joint paper on this subject. In order to render it possible to determine the presence of small quantities of indol in bouillon cultures, the following improved technic was devised:



The culture to be tested received an addition of one drop of chemically pure sulphuric acid for each cubic centimeter of fluid, this being well shaken. In case the micro-organisms produced both indol and nitrites, the red color now made its appearance. When, however, the organisms produced no nitrites, the usual dilute solution of potassium nitrite was allowed to trickle slowly down the side of the tube and form a layer on the surface of the fluid it already contained. The red color of the nitroso-indol now made its appearance at the line of contact of the two fluids. Tests on artificially prepared solutions of indol of upwards of 1-750,000 gave positive results. The authors stated that this improved method was applicable for showing the presence of indol in melted gelatine cultures. After the gelatine had hardened, the color ring was fixed for a period of from twelve to twenty-four hours, when the color became diffused.

MR. FREELAND HOWE, JR., detailed some *results in the use of different kinds of nutrient media* with different periods of incubation, and gave the results of observations on the water of the Susquehanna River, at Harrisburg, Pa.

DR. F. C. HARRISON, of Guelph Ont., gave the *results of the examination of the water supply of Frederickton, N. B.* He discussed briefly the sewerage and water supply systems of that city.

MR. EARL B. PHELPS, of Boston, contributed some *notes on the determination of the organic nitrogen in sewage by the Kjeldahl process.*

OFFICERS.—The election of the Laboratory Section resulted as follows: Chairman, Dr. Wm. H. Park, New York; Vice-Chairman, Mr. H. W. Clark, Boston; Secretary, Dr. John S. Fulton, Baltimore, and Recorder, Dr. H. D. Pease, Albany.

# N. O. Medical and Surgical Journal

---

## Editorial Department.

---

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

---

### Sanitation on the Isthmus.

Mr. Wallace, the chief engineer of the Isthmian Canal Commission, in his recent address to the Pan-American congressists, included among the assets purchased by the United States Government of the French company the lessons taught by the mistakes of our predecessors.

One thing which contributed as much as any other to the failure of the Panama Company in its attempt to build a ship canal across the isthmus was the neglect of sanitation, together with the lack of knowledge regarding the transmission of malarial and yellow fevers.

To-day we understand better the etiology of these fevers, and we must do just the opposite of what was done by those who failed in regard to sanitation and the digging of the waterway. We must profit by the lesson taught by the awful sacrifice of human life due to the absence of sanitary regulations and procedures.

Sanitation is always a matter of importance, but in connection with the stupendous undertaking of cutting the Panama Canal it is of the highest importance. So much so that, in our opinion, it was a mistake not to have a medical member of the Isthmian Commission. It is not too late to correct this error. There is every indication that the Commission is not giving satisfaction; it is too large; it keeps too far away from the legitimate site of its labors; it has not come up to expectations. There is also every sign that President Roosevelt will succeed in having it remodeled. When it is reorganized one of its members should be a sanitarian.

In default of this, the chief sanitary officer of the Commission

should be given a free hand and ample means. This has not been done so far. The sanitary authorities have been hampered by the scaling of their requisitions and delay in filling them.

It had been their plan to sanitize first; that is, clean and drain the canal zone and its two ports, destroy the mosquitoes, eliminate malaria by the medication also of those affected, build sufficient and suitable hospitals; then, with this accomplished, it would have been time enough to begin work with the canal itself and admit large numbers of persons liable to the diseases now prevailing.

Had this plan been followed, this preliminary work would have almost been accomplished by this time; it would not have meant delay, but work on the canal proper would, on the contrary, have been facilitated and expedited.

Instead of this, sanitation has been relegated to second place, with the result that now, at the beginning of the sickly season, there is already some yellow fever both at Panama and at Colon and there are large numbers of non-immunes in those cities and the canal strip.

It is reasonable to suppose that, thanks to the knowledge at present possessed concerning the propagation of yellow fever and to the intelligence and activity of the sanitary forces led by Drs. Gorgas and Carter, a serious outbreak will be prevented; yet, a certain degree of harm has already resulted through the apprehension created, if nothing else. Sufficient labor will at best be obtained with difficulty and a more or less founded dread of disease will not help in securing it.

We are far from wishing to create the impression that nothing has been done towards the proper sanitation of the Isthmus. The gentlemen in charge of this work have accomplished all that could be expected under the circumstances, but they have not been given sufficient opportunity, and should from now on be allowed full scope and all necessary latitude.

---

### **The Pan-American Medical Congress.**

The whole trend of modern intelligence is towards expansion. Knowledge is no longer confined to narrow mystics who traffic in the lesser intelligence of their fellows. As the circles of scientific information have broadened in each centre of the world, their

peripheries have touched and have created a general interest in the fullness and reach of each other. The broad purpose of universal education has been felt in almost every avenue of knowledge, and in science itself this has been more true than in any other field. The students in both hemispheres have met again and again to review the work accomplished in the laboratories and fields of research.

As an outgrowth of the instinctive desire to nurture a common interest, the Pan-American Medical Congress has become an established institution. Its purpose is evidently manifold, and it is a pity that the recent gathering at Panama should have been so small. What it lacked in numbers, however, it made up in spirit, and in the papers presented, in the fraternal spirit evolved it must go on record as a real success.

It is an easy thing for an established government like the United States or that of Mexico to handle an international meeting, and it is all the more creditable to the young republic of Panama that the one now discussed should have gone off successfully.

It was a matter of supreme education to those in attendance that they should have seen the beginning of a mighty undertaking aimed at establishing sanitary conditions in a country where health has always been at a premium, and where unsanitary conditions have prevailed to the extent that for many years the entrance at either side of the Isthmus was marked with the broad legend, "Leave hope behind who enter here."

Already the signs of healthy interference are evident. A river has been corralled to reservoir the water supply for Panama. Pipes are being laid and mains are being prepared to distribute as much as 100 gallons per capita in this pest-ridden city, in which at present the daily supply of Nature's free gift of water has to be peddled in ancient carts going from door to door. The picturesqueness may be lost but with a gain of a remarkable end.

The American people have scarcely realized the stupendous undertaking for which they have authorized a large expenditure of money, but this is as nothing compared with the self sacrifice of those who in the line of duty are amassing the information leading to the successful issue of the Isthmian Canal.

This may have little to do with the Pan-American Medical Congress, but the purpose of every citizen of the Western hemi-



sphere is always the advancement to the ultimate establishment of a high standard for each individual who inhabits any part of its confines.

The bulk of interests naturally lies in the United States, and this was evident in the large representation of some sixty representatives who traveled to a tropical climate under adverse circumstances to meet scientific men from the other Americas.

The next meeting is to take place at Guatemala City in Guatemala, and in the period of time which must elapse before this meeting is consummated everything should be done to exploit its program and purposes so that every Latin speaking country should be ready and wiling to send representatives when the time comes.

It needs the marrying of Latin and Anglo-Saxon instincts to make all of the republics of this great hemisphere united in purpose so that not only medical science but every department of industry, ethics and civilization may be advantaged in the process of amalgamation.

It makes very little difference what the scope of the technical program may be so long as intelligent men come together for the oneness of purpose and education more naturally spread with every individual who participates in a common gathering, aimed at an exalted end.

There are going to be many more Pan-American Medical Congresses, and when the history of each of these is written it will always be remembered that the one which occurred in the City of Panama in the dawn of 1905 will have shared in no small degree in making history.

---

### **Havana and the American Public Health Association.**

The Capital of Cuba has so rapidly come within easy reach of neighboring countries that Havana was most appropriately selected for the late meeting of the Association. There were many reasons why the selection was opportune. Most of the information concerning the Republic of Cuba has come through the daily press and magazine articles. The coloring has naturally in large degree been large or small according to the view point of the press representative.

The meeting was a success both from scientific and social sides. An opportunity was presented of studying Havana during a full

week, and we feel sure that the general conditions justified the favorable resolutions adopted by the Association. There is no city in the United States approaching the size of Havana, which could not readily gather instruction in its methods of city government. Its police is ample, orderly and efficient; its drainage is excellent; its water supply is perfect; and it is probably the cleanest city of the Continent. There may be some dereliction since the days of our military occupation, but on every hand there is evidence that Havana has profited by the lessons learned. Prosperity stares at you. The residential districts in newer Havana have improved both in architectural results and in realty values. A magnificent driveway along the Gulf front has been extended, and even now is going to further continuation. Public buildings have been renovated and hospitals have been modernized.

Thirteen million dollars have been appropriated for the proper sewerage of Havana and the people themselves are clamoring for the execution of the contracts. Electric railways go to almost every point in and near Havana, and the industries of the Island show a direct influence on the people of this beautiful city in the general air of apparent content.

The Eastern press has been largely critical of Havana, and perhaps some of this has been deserved, but we are charitable enough to believe that the object is rather for the benefit of this young and sister republic than otherwise.

Much of Cuba is unsettled. We who live in the Crescent City are apt to realize that it takes more than a day to recover from the evils and consequences of disaster, and Havana is steadily endeavoring to stand on weak legs not yet accustomed to do much walking.

With the remarkable success of the scientific side of the meeting, it might be conjectured that the entertainment features would be as elaborate and as gratifying. The banquet at the Hotel Louvre was generally pronounced the feature of the meeting because of the most apt and graceful addresses made. The President's reception, however, was chronicled as the most gorgeous gathering since Cuba's freedom—and in the array of beautiful costumes, gracious women, gentle music, soft Latin speech, sumptuous entertainment and a representation of the best of Cuban society as well as that of every foreign government attached to

the young republic, there was certainly a splendid and creditable assemblage.

Excursions were made about the city and one entire day was spent in a jaunt to a Cuban plantation, Rosario, owned by Mr. Pelayo. There a Cuban breakfast was served in the shade of trees of tropical verdure and where a summer day in Arcady was pictured in the exotic coloring of the surroundings.

Havana did herself proud, and if breaking bread with a courteous host could make friends, many were made for the Island's Capital; but the glamor of its history, the story of its struggle, the resurrection of a downtrodden spirit, a survival of a hope for good—all must have carried a long way with those who watched the rocky wall of Morro, the long reach of the Malecon and the bright prospect of the Vedado fade into the dim shade of a winter sky as the ships struck outwardbound for the land which had made these things possible.

---

## Abstracts, Extracts and Miscellany.

---

### Department of General Medicine.

---

In charge of Dr. E. M. DUPAQUIER, New Orleans.

---

DECHLORIDATION BY DIGITALIS AND THEOBROMIN—They increase elimination of sodium chlorid. If a quart of urine contains 4 grams of NaCl before, it contains 4 grams 50 after their use. In kidney cases, theobromin, in cardiac cases, digitalis acts best. This explains empirical results, since retention of sodium chlorid causes dropsy. Dechloridation is indicated by the scale. Retention of NaCl increases weight, a forerunner of anasarca. Patient must be weighed every 3 days. If his weight is below his average weight before sickness, his diet need not be so severe; if nearing it, milk diet and chlorid-free diet; if above it, there is danger ahead; in addition give theobromin in kidney cases, digitalis in cardiac cases, and dropsy is curbed, before its appearance.—*Journal de Médecine Interne.*

A HINT TO PREVENT VOMITING OF FOOD after ingestion in pulmonary tuberculosis. First discard alcoholic beverages and drugs, all of which are irritants to the already affected gastric walls, and bring about free expectoration, even emesis, by use of copious draughts of warm water before meals. Then, after meals, in order to prevent rejection of food, prevent the gastro-vagus reflex, which causes cough, cough being a natural defensive act, rejecting by the pulmonary-vagus reflex, offensive foreign material in the lungs. The gastro-vagus reflex is prevented by numbing the over-sensitive gastric walls in administering ice pills, chloroform water, bromoform water, menthol or two to three teaspoonfuls of the following as a last resort:

Morphin hydrochlorid.

Cocain hydrochlorid,\*aa, 5 centigrams.

Dist. water, 150 grams.

—*Tirard. Thornton and Mathieu, Clinique de l'Hospital Andrat.*

INTOLERANCE OF BREAST-MILK.—Suddenly, the baby was taken sick with green diarrhœa, vomiting and growth was arrested. Nursing discontinued, sterilized milk substituted, improvement. Breast-milk resumed; same symptoms reappeared. Examination showed that breast-milk was short of fat and casein; report unsatisfactory to explain intolerance. Latter may be, after all, only a temporary disturbance. It is wise to maintain secretion by aid of the pump and try again the breast after several days. Then, if signs of indigestion persist, give the baby before each feed one teaspoonful of the following:

Sodium bicarb., 6 grams.

Simple syrup, 50 grams.

Distilled water, 250 grams.

Only as a last resort should artificial feeding be adopted.—*Variot, Revue de Therapeutique.*

ADRENALIN IN TWO CARDIO-PULMONARY CASES.—Cardiac incompetency, hyposystole, dilatation, cyanosis from emphysema, adrenalin by mouth 1-20 milligram every 2 hours, 1-2 milligram daily. In one case, after a course of 17 days, improvement. By needle adrenalin seems to be destroyed in the muscles, the liver apparently arrests it; when it passes too quickly into the bloodstream, vasoconstriction is too violent. By mouth it causes continued rise of blood-pressure, decrease and even disappearance of cyanosis and cardiac dilatation. Adrenalin must be given in



very minute doses, and continued for a period, since hypertension is followed by hypotension.—*Boy-Teissier, Journal de Médecine Interne.*

---

## Department of Obstetrics and Gynecology.

In charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER, New Orleans

---

THE INFLUENCE OF HYSTEROPEXY ON PREGNANCY.—C. Jacob (*Bulletin de la Soc. Belgs. de Gynecol. et d'Obstet*). In a discussion upon this subject at the Congress at Rome in 1902 Pinard used the following words: "I take advantage of this interesting communication of our colleagues to once again raise my voice against all methods and all procedures which aim at fixing the uterus in women during the child-bearing period of women. I am not going to discuss vaginal or abdominal hysteropexy or any other means of fixation. I content myself with saying the more the object is attained and the better the result the more is the woman exposed to danger in future pregnancies and confinements." In view of these grave words Jacob has collected and analyzed his own cases. Between 1890 and 1897 he performed abdominal hysteropexy 70 times; he then abandoned this operation for vaginal hysteropexy, which he performed 21 times, finally giving this up also to practice suture of the uterus to the pelvic peritoneum by the vaginal route.

1. *Abdominal Hysteropexy*.—The method employed has been to fix the anterior wall of the uterus to the anterior wall of the abdomen by 2 or 3 silk sutures passed through the muscles up to the superficial aponeurosis. In these 70 cases 29 pregnancies are reported, 26 of the women had borne children previously, 3 had not. In 18 cases the labors were normal, one delivery was accomplished by forceps, one by version; there was one case of placenta previa, and eight miscarriages. The striking feature is the number of miscarriages; these must to a great extent be caused by the irregular development of the uterus, where the fundus has been fixed, particularly when low down. During the first six months of pregnancy it is the fundus which develops most; in the last three months the lower segment; and in cases of ventral fixation it is the posterior wall only which is capable of normal develop-

ment; this is proved by the facts that when Cesarean section has been performed in these cases the incision is on the posterior wall, and when rupture occurs it is this wall which gives way.

2. *Vaginal Hysteropexy*.—The operative procedure has been to fix the upper part of the anterior wall or even the fundus of the uterus to the vaginal wall by means of 2 or 3 silk sutures. In the 21 cases operated upon pregnancy followed 8 times; there were two miscarriages, one case of placenta previa and five normal labors.

The result of the operation is to bring about an exaggerated degree of ante flexion. This gave rise to difficulty in one case, the cervix was prevented from rising, and having caught behind the bulging anterior wall of the vagina could be reached only with the greatest difficulty. In this series there is again noticed the great liability to miscarriage.

3. *Suture of Uterus to the Pelvic Peritoneum*.—"The operative procedure consists in opening the anterior pouch of peritoneum after a transverse section through the anterior vaginal fornix; isolating a strip of peritoneum which covers the bladder, fixing the anterior wall of the uterus towards the upper third to this strip by means of two buried sutures, closing the breach in the peritoneum, and finally suturing the vaginal wall." The great advantage of this procedure is that suturing serous membrane, to serous membrane adhesions are formed, which allow of great mobility and do not prevent the physiological development of the uterus during pregnancy.

This operation Jacob has performed 69 times; pregnancy has followed 21 times, and in each instance has advanced to full term; there was no case of dystocia.

"If we compare these results with those of other operations we can only deduce that vaginal hysteropexy, as we practice it today, is an operation devoid of any injurious consequences during pregnancy; that vaginal fixation and abdominal hysteropexy, on the contrary, are operations which should never be performed upon a woman during the child bearing period of life."—*Ext. Jour. Obst. and Gyne. of the British Empire*, Nov. 1904.

DANGERS OF THE GLASS CATHETER DURING PARTURITION—Hunner (*American Medicine*, Nov. 5), reports a case in which a glass catheter was introduced during labor to empty a distended bladder. During the catheterization, a labor pain came on, with the result was that the catheter was caught between the descending head

and the symphysis pubis and almost half its length was broken off in the bladder. Ten days later it was removed through a Kelly speculum. Dr. Hunner mentions the general use of such catheters by practitioners and nurses and believes that, although the soft rubber catheter is more difficult to use in an aseptic manner, it undoubtedly offers the only secure method of avoiding traumatic injury in catheterization during the first and second stages of labor. Theoretically there would be some danger of perforation in having a metal catheter caught between the oncoming head and the symphysis during a severe labor.

---

## Department of Therapeutics.

---

In Charge of DR. J. A. STORCK, New Orleans.

---

SUGAR TO COMBAT THE EMACIATION OF NEUROPATHS—Chauveau proclaims that sugar is the typical food, and Toulouse has been applying it to fatten emaciated patients at the insane asylum at Billejuif. The sugar was given in amounts of 50 to 500 gm. a day, in addition to the ordinary diet. Patients thus treated gained a third of their weight in the course of a few months. The sugar seemed to exert the greatest influence in this respect when it was given with a milk diet. It was always well tolerated and never induced glycosuria, unless the subjects were already diabetic. Generally, one to three ounces of sugar were given in the form of a syrup, after meals, and seemed always to be relished.—*Semaine Médicale*, Paris—*Jour. A. M. A.*

THE THERAPEUTIC USES OF SCOPOLAMINE—Liepelt (*Berliner Klinische Wochenschrift*, April 11, 1904) states that he has obtained excellent results from the use of scopolamine hydrobromat in all conditions of mental excitement, and that he considers it superior to chloral and morphin, especially in delirium tremens, as it is more certain in action, and has no unpleasant after-effects. He cites several cases in which the drug worked well after chloral and morphin had failed. Liepelt uses the drug hypodermatically and always in freshly prepared solution. The dose administered depends upon the degree of excitement it is desired to overcome, the age of the patient, and his weight. Generally 1-100 of a grain is enough to produce a distinct sedative effect. Quietude supervenes at once and often lasts for three to five hours. In a few cases failure has occurred, but no untoward results have ever been ex-

perienced. In the majority of instances the action of the drug has been entirely satisfactory, and Liepelt believes that its use should become general. [Hyoscine and scopolamine are practically identical.—ED.]—*The Therapeutic Gazette*.

INCREASE IN ALBUMIN AND NITROGEN IN STOMACH CONTENT—Solomon's test consists in rinsing the stomach with salt solution one hour after careful lavage of the stomach. The rinsing fluid is tested for nitrogen and albumin, and amounts over a certain standard, are evidence of the presence of ulceration, as an ulcerating surface exudes constantly more or less serum and an increased proportion of the constituents of the serum testifies to such a condition. The findings in 32 cases of various stomach affections are tabulated in this communication. They demonstrate that the sign is reliable, and may afford important information, although it is unable to differentiate a simple ulcer from an ulcerating carcinoma. This must be decided by other means, which are usually available.—*Deutsche Med. Wochenschrift. Jour. A. M. A.*

COINCIDENCE OF TENDENCY TO IODIN INTOXICATION AND HYPERACIDITY—Netschajeff noticed that symptoms of iodine intoxication coincided with hyperacidity in two cases under his observation. This suggested research to determine whether this was a casual coincidence or a general rule. Nineteen patients exhibiting hyperacidity displayed a marked tendency to iodism in every instance but three. Certain gastric affections are accompanied by the production of nitrites which split the potassium iodide and liberate nascent iodine. This nascent iodine is unmistakably the cause of the tendency to iodine intoxication, and its amount is dependent on the amount of nitrites in the stomach and also on the presence of an acid medium, such as is afforded by hyperacidity of the stomach content. The nitrites are evidently produced by defective action of the gastric juice on the swallowed saliva. It is possible that some of the symptoms hitherto attributed to hyperacidity may be due to the presence of these nitrites in the stomach content. This is especially liable in the case of "masked hyperacidity." This assumption would explain the cases in which the subjective symptoms, oppression in the stomach, pains, eructations, vomiting and loss of appetite all vanished with the vanishing of the iodine-starch reaction and of the Riegler nitrite reaction, although the total acidity and the percentage of H.Cl. persisted unmodified.—*Archiv f. Verdauungs-Krankheiten, Berlin. Jour. A. M. A.*



## Department of Nervous and Mental Diseases.

---

In charge of DR. P. E. ARCHINARD and DR. ROY M. VAN WART,  
New Orleans.

---

**LUMBAR PUNCTURE AND CYTODIAGNOSIS**—The diagnostic value of this procedure, first introduced by Quinke in 1890 as a therapeutic measure, has recently attracted considerable attention.

The normal fluid is perfectly clear but may be blood stained from two causes: puncture of a vein, or hemorrhage into the nervous system. The source of this blood is often difficult to ascertain, but as a rule Sicard found that where the blood was due to a hemorrhage the fluid had a darker tint than where it was due to the operation.

There are other methods open, however, to error which may help to decide the source. The fluid may be received into three separate tubes and if the tint in all three is the same, the blood is probably due to a hemorrhage. Cases, however, have occurred in which this was the case and the autopsy revealed no hemorrhage. Another point is that if there is a clot formed at the bottom of the tube, this is not broken up on shaking where the hemorrhage is due to the operation. The centrifugalized fluid shows the hemoglobin bands on spectroscopic examination in cases of hemorrhage into the nervous system. In some cases of meningitis, blood due to the puncture may be laked by the cerebro-spinal fluid, thus leading to an error in diagnosis. Again a hemorrhagic cerebro-spinal fluid may be caused by a spinal contusion without a fracture of the skull. The study of the cellular elements present, has recently been shown to be of great value. Normally the cerebro-spinal fluid is almost free from cells, containing no polymorphs and few or no lymphocytes. The general rule is that there is in tuberculosis meningitis a lymphocytosis. This is, however, subject to the following exceptions: a lymphocytosis is found during recovery from a non-tuberculous meningitis. Occasionally a leucocytosis occurs in tuberculosis meningitis. A lymphocytosis occurs during various chronic diseases of the nervous system. A leucocytosis occurs during the course of non-tuberculous forms of meningitis. The French writers insist that the technic of Widal should be rigidly followed

and that before concluding that there is a leucocytosis, a differential count of at least 500 cells should be made.

The bacteriological examination is important. In cases of tuberculous meningitis, the tubercle bacillus may be demonstrated by staining the deposit obtained by centrifugalizing the fluid. This is very uncertain and the statistics of different writers vary.

The non-tuberculous forms yield cultures of the organism present and the organisms can be more easily demonstrated than the tubercle bacillus in the centrifugalized deposit.

The measurement of the pressure of the cerebro-spinal fluid has not, as yet, yielded important clinical data. The instruments used give varying results and it is sufficient to note the force with which the fluid flows.

The cryoscopic examination has received considerable attention but the results are not of sufficient importance for ordinary clinical purposes.

The chemical examination in regard to the presence of albumin can be easily carried out by boiling the fluid. The results obtained are conflicting, but there is a pathological amount of albumin present in *tabes dorsalis*, *dementia paralytica*, *syphilitic meningomyelitis* and *hemiplegia*.

---

## Department of the Ear, Nose and Throat.

---

In charge of A. W. DEROALDES, M. D., and GORDON KING, M. D.  
New Orleans.

---

PETROLEUM IN THE TREATMENT OF OZENA—Bobone claims that petroleum has a bactericidal and stimulating action upon the nasal mucosa which especially commends it is an application in atrophic rhinitis. The stimulant effect is enhanced by the addition of strychnin.

He employs a mixture composed of strychnia nitrat, oil of eucalyptus (lemon scented) and petroleum, which is applied to the nasal mucous membrane after a thorough cleansing and antiseptic irrigation of the cavities. According to the author, the crusts and

fetid odor rapidly disappear and more active secretion results.—Transactions Seventh Internat. Congress of Otolology, Aug., 1904.

**ABSCCESS OF THE THYROID BODY**—Mayo Collier reports the case of a man seen by him affected with a large swelling in the region of the thyroid gland following an attack of influenza. The patient was suffering with intense dyspnœa and immediate operation was advised for his relief. Excision of the mass was attempted by two of Collier's colleagues, but the patient died of asphyxia before the operation could be completed or tracheotomy performed. Post mortem examination revealed the presence of a large cyst occupying the left lobe of the thyroid pressing upon the trachea. This cyst had evidently become infected during the course of the influenza and was filled with the offensive dark colored pus.

The rarity of abscess of the thyroid is the interesting feature of the case.—*Journal Laryngology*, July, 1904

---

## Medical News Items.

---

**THE IBERVILLE PARISH MEDICAL SOCIETY** met at Plaquemine on December 27.

Besides the election of officers, interesting papers were read, discussions entered into, applications of new members acted upon and other important business transacted.

A valuable paper was read by Dr. W. L. Grace dealing with an interesting case of continued fever and his successful treatment of the same, after which Drs. Barker, Allain, Kearny and Landry entered into a beneficial discussion of what had been presented them by Dr. Grace.

The applications of Drs. E. A. Pierce and Paul B. Landry, of White Castle, and Dr. Louis Danos were favorably acted upon, and the following officers elected to serve during the ensuing year 1905; Dr. A. A. Allain, President, Bayou Goula; Dr. W. E. Barker, Vice-President, Plaquemine; Dr. W. L. Grace, Secretary and Treasurer, Plaquemine; Dr. F. J. Kearny, Plaquemine, and Dr. Paul Landry, White Castle, Censors.

**THE LOUISIANA TUBERCULOSIS SANITARIUM**—Under this name, Dr. Wallace Durel has finally estalished a private institution at Cov-

ington, La. The announcement of its inception especially states that advanced cases will not be taken.

**NEW DUST CLEANER IN RAILWAY CARS**—The Central Railroad of New Jersey now uses the vacuum sweeping system which avoids spreading of dust and thoroughly cleans. This method has been in vogue for some time in European hotels.

**AT A MEETING OF THE LINCOLN PARISH MEDICAL SOCIETY** recently held, the following officers were elected for the ensuing year: Dr. R. F. Harrell, Ruston, President; Dr. W. H. Cook, Choudrant, Vice-President; Dr. S. F. White, Ruston, Secretary; Dr. W. S. Kendall, Ruston, Treasurer. Dr. Alphonse De Seay was elected a member of the Board of Censors, to serve for a period of three years.

The society tendered a vote of thanks to Dr. R. Roberts, the outgoing President, for the efficient manner in which he conducted the affairs of the Society during two terms of office.

The Society is now in a flourishing condition; all regular physicians of the parish except two, are members. The monthly meetings are well attended, and the organization has now proved a necessity to the profession in Lincoln Parish.

**OSLER MEMORIAL.**—The Maryland profession have started a movement to create a memorial to Dr. Osler, to celebrate his departure from Baltimore. It is proposed to erect a library building in Baltimore to be named after Dr. Osler. A National Committee, with Dr. J. H. Musser, of Philadelphia, at the head, has been organized, and any contribution may be sent to Dr. Henry Barton Jacobs, at 11 Mt. Vernon Place, West Baltimore, Md.

**THE LAFORCHE MEDICAL SOCIETY**, at its regular meeting, held January 20, elected Dr. J. J. Ayo President, and Dr. J. A. Price Secretary and Treasurer.

**THE PLAQUEMINE MEDICAL ASSOCIATION** held its semi-annual meeting January 20, and elected the following officers: Dr. J. K. Johnson, Buras, President, and Dr. H. L. Ballowe, Secretary and treasurer. The annual banquet was given at the Meyers hotel.

**MARRIED**—At Covington, On December 20, 1904, Dr. William Foster Pettit to Miss Roberta E. Guyol.

At Lake Providence, La., a wedding was celebrated, the contracting parties being Dr. John E. Brown and Miss Pearl Fisher. The doctor and his bride left for a wedding trip through Southern Louisiana.



**DIED**—Dr. W. P. Hough, of Columbia, La., died after a lingering illness. By his own request, the doctor was buried at Natchez, Miss.

Dr. F. C. Otis, of Hazelhurst, Miss., died in his 82nd year. The doctor was one of the old school, and had practiced in Hazelhurst for over forty years.

At Yazoo City, Miss., Dr. P. J. McCormick died of apoplexy. Dr. McCormick had been a resident of Yazoo City for forty years.

Suddenly, at Donaldsonville, La., Dr. J. L. Richard died. The doctor was 56 years of age and had been a life-long resident of Donaldsonville. Dr. E. J. Richard of New Orleans is a son of the deceased.

**PERSONAL**.—Dr. J. W. Sanders has been appointed Coroner of Iberville Parish.

Dr. R. H. von Ezdorf, of the U. S. P. H. and M. H. service, has been located at Colon, Panama.

Dr. J. C. Allen is the City Physician for Baton Rouge for this year.

Dr. Carroll W. Allen, a former resident of New Orleans, who recently moved to Crowley to practice, has returned to this city, and has an office in the Medical Building, where he will continue to practice his profession.

Dr. W. E. Black has removed from Leger, Oklahoma, to Marion, La., and will form a partnership with Dr. O. H. Thompson, and practice his profession.

Dr. M. Provosty of New Roads has come to this city to practice.

Dr. E. E. Dickason has moved from Shelby, Miss., to New Roads, Louisiana.

Dr. S. A. Poole has moved from Simsboro, La., to Ruston, La.

Dr. J. B. Easterly has removed from Gonzales, La., to Denham Springs, La.

Dr. A. F. Phillips has moved from Springridge to Robson, La.

Dr. Warren E. Bickham's new address is No. 10 East 58th Street, New York City.

Drs. Quitman Kohnke, J. N. Thomas, Chas. Chassaignac and I. Dyer have returned from Havana, where they attended the annual meeting of the American Public Health Association.

Mr. A. R. Elliott, of the A. R. Elliott Publishing Co., gave a luncheon at the Hardware Club to Dr. F. P. Foster, to commemorate the completion of his twenty-fifth year as editor of the *New York Medical Journal*. The guests were the staff of the *Journal*, his colleagues in the medical press, and intimate personal friends of the guest of honor.

MESSRS. WILLIAM WOOD & Co. have issued a small brochure giving a brief history of their house since it was founded in 1804. This reputable firm is to be congratulated upon completing its 100th anniversary.

THE SOCIETY OF MEDICAL JURISPRUDENCE OF NEW YORK held its one hundred and forty-ninth annual meeting during the month of December. A resolution was adopted substituting the title "physician" for "doctor" in all literature of the Society which will be published hereafter.

---

## Book Reviews and Notices.

---

*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

---

*A Handbook of Diseases of the Eye and Their Treatment*, by HENRY R. SWANZY, A.M., M.B., F.R.C.S.I. Fourth Edition Revised. Philadelphia. P. Blakiston's Sons & Co., 1903.

---

*A Handbook of Ophthalmic Science and Practice*, by HENRY E. JULER, F.R.C.S. Third Edition Revised and Enlarged. Philadelphia. Lea Bros. & Co.

Both of these well-known and authoritative texts appear not only in enlarged, but in greatly improved and fully modernized forms. Juler's book appears to us, however, deformed by the glaring lithographs. When the far better executed Haab's Atlases are now published so cheaply as to bring them within the means of every student it seems a pity that the authors of texts insist in introducing these over-colored pictures that only serve to increase the cost of the book.

H. D. B.

*Pain and Its Indications.* An Analytical Outline of Diagnosis and Treatment, by EDWARD C. HILL, M.S., M.D. G. P. Engelhard & Company, Chicago, 1904.

This is indeed a most valuable *vade mecum*. As the author says in his foreword, to the patient pain is the most important of symptoms. It is indeed that which most often leads him to seek medical advice. The great variety of causes of regional pains and the consequent difficulty of differentiation and of rational casual treatment, are appreciated by physicians and surgeons. All sorts of pains are systematically arranged and indexed in this book, so that it is easily consulted, and great benefit may be derived from such a reference since one is at any time liable to overlook a point or two, as regards certain regions, that lead to the discovery of the cause and consequently to the proper treatment of pain. It is a safe reminder. Following this plan, a whole series of monographs on treatment could be usefully presented, each morbid process or each symptom common to a number of diseases and from which indication for treatment is derived, being systematically considered in a separate book.

DUPAQUIER.

## Publications Received.

**J. B. Lippincott & Co.,** Philadelphia, 1904.

*A laboratory Manual of Human Anatomy*, by Dr. D. Lewellys F. Baker.

**Lea Bros. & Co.,** Philadelphia and New York, 1904.

*Practical Therapeutics*, Tenth Edition. Hare.

**W. T. Keener & Co.,** Chicago, 1904.

*Medical Laboratory Methods and Tests*, by Dr. Herbert French.

**Frederick A. Stokes Co.,** New York, 1904.

*Physiological Economy in Nutrition*, by Dr. R. H. Chittenden

**W. B. Saunders & Co.,** Philadelphia, New York and London.

*General Pathologic Histology*, by Dr. Hermann Durck.

*Diseases of the Liver, Gall Bladder and Bile Ducts*, by Dr. H. D. Rolleston.

*Diet in Health and Disease*, by Drs. Julius Friedenwald and John Ruhrah.

*Personal Hygiene*, by Dr. Walter L. Pyle, Second Edition.

*Gall Stones and Their Surgical Treatment*, by B. G. A. Moynihan, M.S., F.R.C.S.

**Hinds & Noble,** New York, 1904.

*How to Study Literature*, by Dr. B. A. Heyodrick. Third Edition.

**P. Blakiston's Son & Co.,** Philadelphia, 1904.

*Manual of Operative Surgery*, by Dr. J. F. Binnie.

*Bacteriology and the Public Health*, by Dr. George Newman.

*Clinical Hematology*, by Dr. John C. Dacosta.

*Dictionary of New Medical Terms*, by Dr. George M. Gould.

*Mental Defectives.* Barr.

**D. Appleton & Co.,** New York and London, 1905.

*Normal Histology and Microscopical Anatomy*, by Dr. Jeremiah S. Ferguson.

**F. A. Davis Co.**, Philadelphia, 1904.

*Surgical Diseases of the Genito-Urinary Tract*, by Dr. G. Frank Lydston.

*Text Book of Insanity*. Krafft-Ebing.

**Cloyd J. Head & Co.**, Chicago, 1904.

*Pneumonia. Pneumococcus Infections*, by Dr. Robert J. Preble.

**Lea Bros. & Co.**, Philadelphia and New York, 1904.

*Progressive Medicine*. Hare-Landis. Vol. VI. No. 4.

**The Laryngoscope Co.**, St. Louis, 1904.

*The Nose and Throat in Medical History*, by Dr. Jonathan Wright.

**W. T. Keener & Co.**, Chicago, 1905.

*The Surgery of the Diseases of the Appendix-Vermiformis, and Their Complications*. Battle-Corner.

**The Saalfeld Publishing Co.**, Chicago, Akron, New York, 1904.

*The Doctor's Recreation Series.. In the Year 1800*, by Dr. S. W. Kelley.

### Miscellaneous.

*Transactions of the Mississippi State Medical Association; 37th Annual Session.*

*Annual Report of the Surgeon General of the Public Health and Marine Hospital Service of the United States for the Fiscal Year 1904.*

*Transactions of the American Otological Society. 37th Annual Meeting.*

*Immunity From Consumption; Cause and Treatment of Consumption; Massage Treatment for Consumption*, by Dr. Cyrus L. Topliff.

*Shall we remove All Fibromata of the Uterus on Diagnosis; Certain Associated Disorders of the Hepatic and Pancreatic Ducts and Upper Small Intestine, and Their Treatment by Drainage of the Gall Bladder*, by Dr. Thomas Eastman.

*Poisoning by Wood Alcohol*. Buller-Wood.

*The History of Pediatrics and Its Relation to the Sciences and Arts*, by Dr. A. J. Jacobi.

*Bacillus Pyocyaneus Septicaemia Associated with Blastomycetic Growth in Primary Wound*, by Drs. Eastman and Keene.

*The Aseptic Technic of Abdominal Surgery with the Topographical and Visceral Anatomy of Male and Female Abdomen*, by Dr. H. O. Walker.

*Regarding Hamlet's Sanity and a Few Quotations From Shakespeare Showing His Acquaintance with Medical and Other Sciences*, by John W. Wainwright, M. D.

*The Analytical Study of Twenty-eight Cases of Arthritis, with Special Reference to Gout and Its Treatment*, by Dr. Charles C. Ramson.

---

## Reprints.

---

*Primitive Medicine*, by Dr. E. J. Kempf.

*Report on the Curricula of American Medical Colleges*, by Dr. G. W. Webster.

*The Aseptic Technic of Abdominal Surgery, Etc.*, by Dr. H. O. Walker.

*Bacillus Pyocyaneus Septicaemia Associated with Blastomycetic Growth in Primary Wound*, by Drs. Joseph R. Eastman and Thos. V. Keene.



*Nonoperative Relief of Eyestrain for the Possible Cure of Epilepsy as Tested in Sixty-eight Cases at the Graig Colony*, by Dr. Wm. P. Spratling.

*Medical Discoveries by the Non-Medical; The History and Etiology of "Migraine;" The Ill Health of Francis Parkman; The Non-Operative Treatment of Strabismus; The Ill Health of Richard Wagner; The Ill Health of the Poet Whittier; The Ill Health of Margaret Fuller-Ossoli; The Ill Health of Herbert Spencer; The Ill Health of Jane Welsh Carlyle; Some Intellectual Weeds of American Growth; Dextrality and Sinistrality; Torticollis and Spinal Curvature Due to Eyestrain; Malposition of the Head (Torticollis, Cantled or Tilted Head), With Resultant Ill Health, Spinal Curvature, Etc., Due to Eyestrain; The Reception of Medical Discoveries; Suggestions as to Postmydriatic Refraction Tests; Taine's Ill Health; Eyestrain and Civilization; The Pathologic Results of Dextrocularity and Sinistrocularity; Sixty-eight Reasons Why "Glasses Did Not Give Relief;" The New Ophthalmology; Eyestrain and the Literary Life*, all by Dr. George M. Gould.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)  
FOR DECEMBER, 1904.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	5	2	7
Intermittent Fever (Malarial Cachexia) .....	2	1	3
Small Pox.....			
Measles.....			
Scarlet Fever.....			
Whooping Cough.....	2		2
Diphtheria and Croup.....	7	1	8
Influenza.....	5	1	6
Cholera Nostras.....			
Pyemia and Septicemia.....		1	1
Tuberculosis.....	43	37	80
Cancer.....	15	10	25
Rheumatism and Gout.....			
Diabetes.....	1		1
Alcoholism.....	1		1
Encephalitis and Meningitis.....	4	1	5
Locomotor Ataxia.....	1	1	2
Congestion, Hemorrhage and Softening of Brain.....	15	12	27
Paralysis.....	2	2	4
Convulsions of Infants.....	3	1	4
Other Diseases of Infancy.....	19	10	29
Tetanus.....	3	4	7
Other Nervous Diseases.....	1		1
Heart Diseases.....	37	27	64
Bronchitis.....	3	3	6
Pneumonia and Broncho-Pneumonia.....	32	18	50
Other Respiratory Diseases.....	1		1
Ulcer of Stomach.....		1	1
Other Diseases of the Stomach.....	4	2	6
Diarrhea, Dysentery and Enteritis.....	11	7	18
Hernia, Intestinal Obstruction.....	3		3
Cirrhosis of Liver.....	7	3	10
Other Diseases of the Liver.....	2	2	4
Simple Peritonitis.....			
Appendicitis.....	3	1	4
Bright's Disease.....	35	26	61
Other Genito-Urinary Diseases.....	1	1	2
Puerperal Diseases.....	2		2
Senile Debility.....	17	11	28
Suicide.....	1		1
Injuries.....	28	25	53
All Other Causes.....	21	4	25
<b>TOTAL.....</b>	<b>337</b>	<b>215</b>	<b>552</b>

Still-born Children—White, 25; colored, 15; total, 40.

Population of City (estimated)—White, 223,000; colored, 84,000; total, 317,000.

Death Rate per 1000 per annum for Month—White, 17.35; colored, 30.71; total, 20.89.

## METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure..... 30.13  
Mean temperature..... 55.  
Total precipitation..... 2.37 inches.  
Prevailing direction of wind, northwest.

# *New Orleans Medical and Surgical Journal.*

---

VOL. LVII.

MARCH, 1905.

No. 9

---

## Original Articles.

---

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints may be had at reasonable rates if a **Written** order for the same accompany the paper.]

---

### **Etiology of Acute Prostatic Inflammation and Suppuration.**

By G. FRANK LYDSTON, M. D., Chicago, Ill.

Professor of Genito-Urinary Surgery and Syphilology, State University of Illinois;  
Attending Surgeon, St. Mary's and Samaritan Hospitals.

Acute prostatitis is one of the most serious and painful of the acute affections of the genito-urinary system. The infection that most often gives rise to it is so prevalent that the disease is quite frequent. In a general way, while acute prostatitis may or may not be preceded by predisposing hyperemia of greater or less duration, the disease is rarely a primary affection excepting it be of traumatic or chemic origin or the result of pyogenesis produced by constitutional infection such as exists in variola and parotiditis. As usually met with, it is a complication, not a primary disease.

The profound local and constitutional disturbances existing in a large proportion of cases of acute prostatitis, especially in those forms in which suppuration results, are entirely disproportionate to the size and physiologic importance of the organ involved. The

affected part, however, is exceedingly sensitive from its abundant supply of general and special sensory nerve filaments, and is of great importance because of its abundant sympathetic nerve supply and consequent intimate relation with the various organs involved in the functions of organic life. In this respect it resembles its co-laborer in the generative function, the testis. Like the latter organ, it is surrounded by a tough resisting capsule, and in addition by an environment of firm, resisting structures. Because of this anatomic arrangement, the organ does not yield readily to the pressure of exuded inflammatory products or exaggerated blood supply. This, in connection with the exceedingly sensitive and abundant nerve filaments, is sufficient to explain the severe pain, nervous depression, and other constitutional disturbances in prostatitis. The same anatomic conditions, in connection with the close proximity of the affected organ to the rectum, explain the disturbance referable to the latter viscus in acute prostatic inflammation.

**ETIOLOGY:** The causes of acute prostatitis, as outlined by some authors, are rather complex, presenting many elements of impracticability and confusion. Practical clinical experience shows that, while many predisposing elements demand consideration, acute prostatitis is due, in the majority of cases, to causes of quite common character. Thus, nearly all cases are due to extension of acute urethritis, usually gonorrheal. Other factors are to be taken into consideration, it is true, in suppurative cases, because of the clinical fact that in by far the larger proportion of cases of acute prostatitis suppuration apparently does not follow. I base this broad assertion upon the view that in the majority of cases of acute inflammation of the prostate the process is limited to the glandular structures of the organ, and partakes of the same characters as the original gonorrheal infection, with certain modifications due to anatomic and physiologic peculiarities of the affected part. Mechanic interference with the prostate in the treatment of acute or chronic bladder disease, or in vesical exploration, is responsible for most of the remaining cases. Even here we have gonorrheal or other urethral infection as the principal etiologic factor, the instrument used or the abrasion produced by it acting merely as a carrier of infection, on the one hand, or a *locus minoris resistentiæ*, on the other. Experience



has shown that in every case of urethral disease, acute or chronic, more particularly in the acute, the patient is constantly liable to acute prostatitis. In view of the careless, routine, and often over-vigorous treatment of gonorrhea, to say nothing of the vicious, self-imposed unhygienic conditions of the patient, it is surprising that prostatic complications do not occur in nearly every case of gonorrheal infection. That patients with virulent specific urethritis should escape prostatic complications is remarkable, when we consider the high degree of infectiousness of the various microbial organisms found in that typically mixed infection, gonorrhea. Acute prostatitis may be developed by trifling causes during the course of a gonorrhea. The cause may consist of all-advised attempts to cure the disease or misconduct on the part of the patient. It is especially liable to follow sexual indiscretions or excitement. Alcoholic and dietetic excesses and over-exertion play an important role in developing this complication.

The following rather simple classification may give a somewhat clearer insight into the etiology of acute prostatitis than the foregoing remarks:

#### ETIOLOGY OF ACUTE PROSTATITIS.

##### *Predisposing Causes.*

GENERAL.—Gouty and rheumatic diatheses.

Alcoholic and dietetic excesses.

Exposure to cold.

LOCAL.—Highly acid urine.

Hyperemia from whatever cause.

Acute or chronic urethritis.

Stricture.

Chronic prostatic disease.

Cystitis or other vesical disease.

Vesical calculi.

Rectal and anal disease.

Portal obstruction.

Constipation or diarrhea.

Over-exertion, and such forms of exercise as bicycling and horseback riding.

*Exciting Causes.*

Gonorrhea and its congeners—by direct extension, or indirectly by absorption of infectious materials, i.e., germs or their products.

Traumatism. Surgical or accidental, chemic or mechanic.

Sexual indulgence.

Chemic irritation.

Vesical or prostatic calculi.

Transportation of infectious material by deep injections or instrumentation.

Bacterium coli infection from the rectum.

Broadly speaking, by far the majority of cases of acute prostatitis are due to infection in some form. This being accepted, it is obvious that many of the causes outlined in the above table are secondary and subordinate to infection. If we add to the cases produced by infection the relatively much smaller number of cases produced by mechanic and chemic violence, we have practically covered the etiology of acute prostatitis. It is to be understood also that in many instances chemic and traumatic injuries of the prostate produce inflammation solely by carrying infection or by opening up avenues for the absorption of infectious material. It is, of course, difficult to separate these cases from those in which the inflammation is immediately due to traumatic or chemic causes. It is safe to assume, however, that, in those cases in which suppuration occurs, chemic or traumatic injury to the prostate, if it exists at all, is a factor subordinate to infection.

Exposure to cold, associated or not with a gouty or rheumatic diathesis, is not, in my opinion, a sufficient cause for acute prostatitis, unless infection exist. That profound disturbance of the circulation of the prostate may result from chilling of the surface of the body, particularly of the lower extremities, is admitted. But that this will cause acute prostatitis where some source of infection is not present cannot be accepted in the light of our present knowledge of the germ origin of disease. If, however, infection of the urethra, prostate, or bladder exists, the circulatory disturbance produced by exposure may lessen resistance to germ infection on the part of the prostate, with consequent acute prostatitis, with or

without abscess. Cases are frequent in which patients presumably have had no infectious disease of the genito-urinary tract, but in whom irritation of the vesical neck results from exposure to cold. It will be found, however, that in such cases there usually exists a more or less marked tendency to rheumatism or gout. Many cases of so-called prostatitis consist merely in irritation of the mucous membrane of the prostatic urethra, due to an excess of acid crystals in the urine incidental to chilling of the surface of the body. Such cases are frequently diagnosed as acute prostatitis. In the majority of them, however, not only is there no inflammation of the prostate proper, but no inflammation even of the prostatic urethra; the condition is merely local irritation of highly sensitive nerve filaments due to disproportionate increase of the solid constituents of the urine, involving irritating crystals of uric acid and possibly calcium oxalate.

The prolonged contact of the perineum with a cold, damp surface is said to cause acute prostatitis. While this may be a secondary cause, it is probably incapable of inducing acute inflammation unless there is some source of infection. The gouty and rheumatic diathesis, either alone or associated with exposure, may develop prostatic irritation and possibly acute prostatitis in cases in which infection already exists.

Gout and rheumatism not only produce aberration of the quality and quantity of urinary solids, and alteration of urinary reaction, but also intrinsic irritability of nervous and vascular structures, by virtue of which they react more promptly and markedly to sources of irritation.

It is obvious that an individual exposed to psychic or physical causes of sexual excitement is especially predisposed to acute prostatitis in the presence of infectious genito-urinary disease. It is certain that, if this predisposing cause could be eliminated in the majority of cases of acute or chronic genito-urinary disease, the proportion of cases in which a complicating prostatitis develops would be materially reduced. Acute or chronic urethral disease is a constant menace to the prostate. Stricture is especially worthy of consideration in this regard. Acute or chronic urethral inflammation leads to acute prostatitis through comparatively trifling exciting causes. Chronic prostatic disease, especially those forms in which a focus of infection exists in the prostatic urethra

or bladder, is very liable to be complicated by acute prostatitis. Especially is this true if traumatic interference, in the form of violent or often-repeated catheterization, be added as an exciting cause. Acute prostatitis or paraprostatitis is a rather frequent complication of prostatic hypertrophy. What has been said of acute and chronic disease of the prostate also applies to cystitis. The infectious products of vesical inflammation may, at any time, under the exciting influence of traumatism or through the medium of a secondary infection of the prostate and prostatic urethra, produce acute prostatitis.

Rectal and anal disease exert so profound an influence over the vascular and nervous supply of the prostate that their importance as etiologic factors predisposing to acute inflammation of the organ is readily understood. Physical exertion—particularly that involved in walking, running, lifting, bicycling and other forms of athletic exercises in which more or less strain is brought to bear upon the perineum—tends to produce irritability and hyperemia of the prostate, in the presence of which any source of infection is apt to lead to acute inflammation of the organ.

In by far the majority of cases of acute prostatitis there exists some urethral source of infection, either patent or obscure, as a direct cause of the acute inflammation. True, suppurative inflammation of the urethra is not, however, absolutely necessary in order that infection of the prostate by germs or germ products may occur. Thus the infection may consist of the products of decomposing urine, or the secretions of urethral or prostatic catarrh confined behind some obstruction of the canal, such as is afforded by prostatic hypertrophy or stricture. The cause is most likely to be a recent gonorrhea of acutely virulent type, but the infective inflammation may be subacute or chronic. Simple urethritis, acute or chronic, presents a secretion teeming with germs and their products that may at any time produce acute inflammation of the prostate. It must be remembered, in this connection, that it is probably the mixed character of the gonorrheal infection that is responsible for the cases in which suppuration of the prostate or periprostatic tissues occurs. Laying aside acute follicular prostatitis, i.e., posterior urethritis occurring in the course of acute or chronic gonorrhea—the pus microbe and its products are responsible for prostatic complications. It is safe to assert that in



most cases of acute prostatitis an area of bacterial infection exists in the deep urethra. This may consist of acute suppurative or chronic infective inflammation of the bulbous or bulbo-membranous region. In the presence of such conditions the slightest traumatism or the occurrence of active hyperemia may at any time produce acute inflammation of the prostate.

One of the most frequent causes is mechanic disturbance of the prostate in sexual intercourse. During the venereal orgasm the muscular tissues of the perineum, and incidentally of the prostate, act somewhat like the bulb of the ordinary soft rubber syringe. The spasmodic contraction incidental to the orgasm alternates with relaxation, during which the deep perineal muscles and prostate exert an aspirating effect upon the urethra. The superfluous semen is drawn back into the deep urethra preparatory to the occurrence of the final spasmodic muscular contraction by means of which the last few drops of semen are to be expelled. During the backward aspiration of the semen into the deep urethra any infectious materials that may be present in the anterior portion of the canal are forcibly drawn into the deeper parts, where they produce acute inflammation. This, while primarily an acute follicular prostatitis, may be followed at any time, perhaps within a very short period, by acute diffuse inflammation and possibly abscess. Patients developing acute prostatitis in the course of gonorrhea often confess sexual indulgence or a nocturnal emission as the immediate existing cause. In my opinion, the foregoing constitutes a logical explanation of its occurrence.

In quite a proportion of cases prostatic infection in the course of gonorrhea or urethritis results from deep injections or the passage of instruments. While it is true that in some instances the exciting cause would seem to be a high degree of chemic irritation produced by the injection, it is probable that in most instances in which the prostatitis can fairly be attributed to injections the fluid used is only indirectly responsible for the prostatitis, inasmuch as it serves merely as a carrier of germ infection. It is probable that the injection of pure water would be even more effective in this respect. It has been my experience that the frequency of prostatic complications is directly proportionate to the vigor with which acute gonorrhea is treated. Some of the worst cases are due to the passage of instruments for the relief of re-

tention or treatment of the urethritis. Soluble bougies and deep urethral irrigation, used during the acute stages of urethral inflammation, have been responsible for many cases. The soluble bougie or the tube used in deep irrigation acts as a carrier of germs which the injected solution is too weak to destroy. Then, too, we have the abrading effect of the instrument or soluble bougie upon already degenerated and readily removable epithelium. This opens up avenues of infection that otherwise might possibly never develop.

The excessive use of terebinthinate and balsamic preparations has been said to cause prostatitis. It is possible that in immense toxic doses these drugs in combination with an already existing infection of the deep urethra may be operative in the production of acute inflammation, but under no other circumstances. Cantharides in poisonous doses produces inflammation of the prostate in common with all the other structures composing the genito-urinary tract.

In concluding the etiology of acute prostatitis, I desire again to impress the paramount importance of infection as a factor, and to insist on the subordinate character of by far the larger proportion of the causes enumerated in the practical etiologic classification herein suggested. The practical point of greatest importance is the clinical fact that, given an acute or chronic source of infection, and especially the former, very slight interference with the urethra and bladder may cause acute inflammation and perhaps abscess of the prostate.

---

### **Tubercular Adenitis and Hodgkin's Disease; Is the Etiology Identical?**

By J. R. BRIGGS, M. D.,

House Physician to the Briggs-Clay Sanitarium, Dallas, Texas.

Several years ago I made a grave error in diagnosis by mistaking a case of tubercular adenitis for Hodgkin's disease and a few years later, as a compensation for this blunder, I made another equally serious error by diagnosing a case of Hodgkin's disease for tubercular adenitis. At first thought it would seem inexcusable that any physician of long experience could make two such blunders, but let us imagine the size of a volume requisite for the publica-

tion of our mistakes. Such a book would doubtless be interesting and valuable to the younger members of the profession. Our usual custom is to publish our successes, frequently polishing them with elegant qualifying adjectives, saying nothing of our humiliating shortcomings. Whether or not such a course is right and proper I leave the reader to decide.

Having been in a special line of work in which I have met many cases of adenitis I must confess that my diagnostic acumen has often been sorely tried. In both of these diseased conditions the localization is the same—the lymph glands. Both pathological states are found most frequently in the young, in each the glands may attain the size of a cocoanut and at times such glandular enlargements disappear without treatment. Still further analogies exist in that a remittent fever may be found in both diseases as well as caseation or necrosis. Loss of physical strength and resistance are noted alike and many other indistinguishable appearances and symptoms could be shown. It is asserted, however, by many noted authorities, that there is a real wide pathological difference between these diseases; yet, the attendant confusion in practice reminds me of what an old "brush doctor" once remarked to me on the "signs of pregnancy." He said he never allowed such problems to annoy him; that he always waited 'till the "child was born." So in such doubtful cases we must, presumably, await an autopsy. But even autopsies do not always reveal to us the etiology of diseases. So, primarily, is it not possible that these two pathological states, may, in reality, be the same disease presenting unusual phases or in different stages; or, in other words, may not tuberculosis be the prime factor in both instances? I am inclined to think this true, or, that the two diseases are more often allied than has heretofore been regarded. I have arrived at this conclusion by careful and painstaking work. We know, of course, that lymphadenoma is comparatively a rare disease; and perhaps this may account for the different opinions held by different physicians. All agree that after the disease of lymphadenoma is far advanced that the differentiation is unmistakably clear, but how about an early diagnosis and the etiology? How are early stage cases of these diseases distinguished? The text books do not tell us.

As tuberculous adenitis is too well known to the profession to

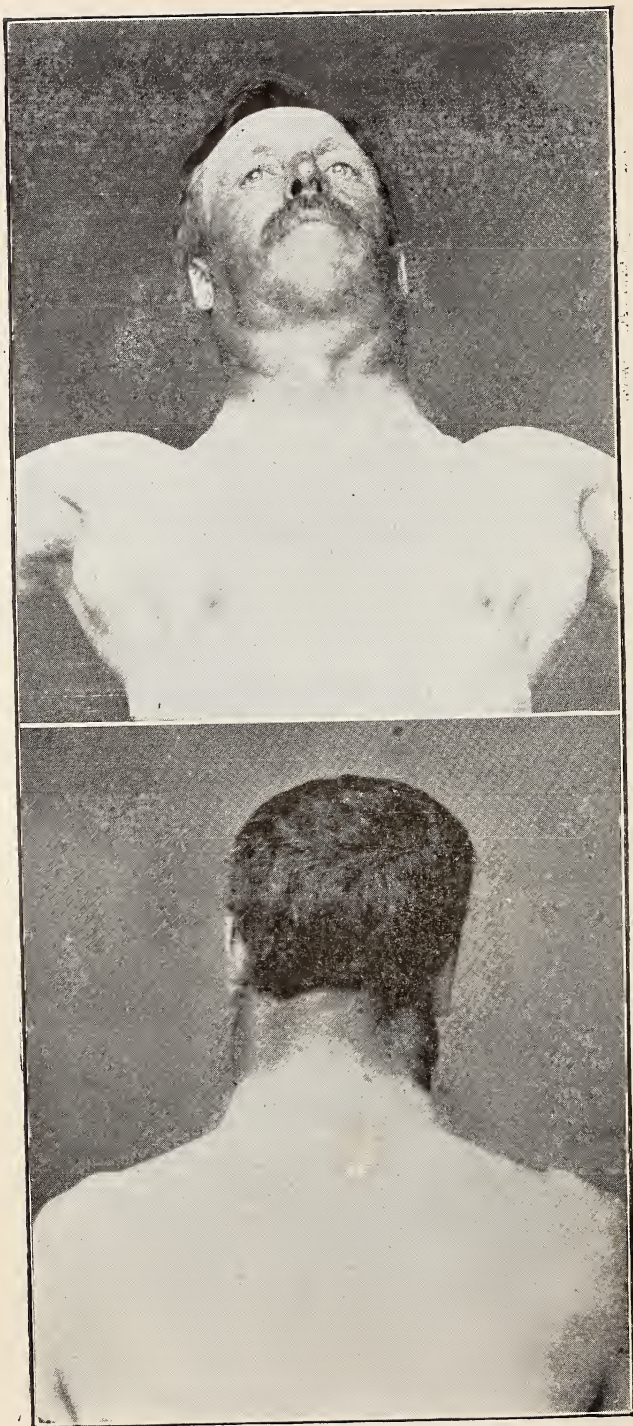
require the mention of symptoms and appearances I shall confine myself to the comparative pathological conditions, or findings, in these diseases and their treatment. I do this with the view of at least showing the *possibility* of the identity of these two diseased states. In order that my subsequent remarks as to the identity or association of these affections may be better understood, I give below a case of Hodgkin's disease which came under my care two years ago.

L., male, aged 32, farmer, weight 147 pounds, height five feet seven inches. Family history good, except mother died of consumption. He was sent to the Sanitarium from Nebraska by his physician, with a diagnosis of "glandular tuberculosis." His general health was good, except an evening rise of temperature, ranging from 99.5 to 100 degrees F., pulse 70; appetite good; weight practically normal; general appearance good. Aside from his enormous glandular enlargements and slight daily rise of temperature a painstaking examination failed to reveal any abnormal conditions. Careful measurements of the neck at base, center and top showed respectively 19 1-2, 21 and 20 inches in circumference. He informed me that previous to the glandular hyperplasia he wore, with comfort, a No. 15 collar. By making due allowance for the size of collar, in excess of actual neck measurement, I calculated that the increase of the neck in size was about seven inches. While sitting down, in a state of rest, the enlargements seemed much exaggerated. As to appearances in the erect position, see photograph of front and back, taken on arrival at the Sanitarium. The inguinal glands were very large. A careful examination of the glands by palpation showed the first and greater enlargements to be hard and firm, while the more recent and smaller ones were soft and elastic with a tendency to fuse together as they increased in size.

He gave the following brief history: Was raised on a farm, had never been seriously ill or ever had any accidental injury of any kind until eight month previously, when he received quite a severe abrasion of the middle knuckle of the right hand. About forty or fifty days thereafter, and before the wound had healed, he noticed a small nodular swelling in the right axilla and in a few weeks more a small enlargement was noticed in the cervical glands and next in order the inguinal. Small elastic nodes were







Case of DR. J. R. BRIGGS.

found in various parts of the body, and on my first examination he pointed out several "not over two weeks old." All the enlargements increased at a rapid rate, the inguinal being first in order of size, then the axillary and last the cervical. The inguinal regions were filled with large, hard, firm tumors which were plainly composed of smaller ones fused together. In each groin these multiple aggregations were as large as two fists of a large man. That new ones the size of a cherry were constantly coming there was no doubt; yet that he suffered such slight inconvenience from these tumors was hard to understand.

Two grave questions confronted me, viz: What had I to contend with and what were the indications for treatment? That the case was plainly one of infection there was no doubt in my mind. As to the etiological factor I had no means of knowing, but I was firmly impressed that it must be the tubercle bacillus. Under this conviction and knowing nothing else to do I placed the patient under treatment by hypodermic injections of the culture products of the tubercle bacilli. The daily dose was rapidly increased for the first thirty days without any noticeable changes either locally or systemic. The remedy being still pressed with great vigor on the forty-second day the enlarged gland at the base of the right side of the neck, clearly visible in the photograph, back view, became very tense and painful, and with this there was a sudden rise of temperature to 102.3 degrees. The remedy was then ceased for two days and the initial dose was returned to with a subsequent gradual increase of the dosage. In five days the temperature was 99.5 degrees. Gradually the tumefaction softened, its volume decreased rapidly and in two weeks from the time of the local reaction it had practically disappeared, and in three weeks there was not a trace of it left. Its size was somewhat larger than a hen's egg. In the meantime there had been no new growths. The remedy was then pressed with renewed energy with the hope that the large tumors might likewise be absorbed, but this hope was in vain, as careful daily measurements, by a steel tape, showed no diminution in the size of the neck as a whole. Several smaller nodules reacted, softened and rapidly disappeared. During the four months he was under treatment there were no new growths; one moderately large one and numerous smaller ones having disappeared, the case came to a standstill; he left for home and re-



turned to his farm work and I lost sight of the case. On leaving the Sanitarium his health was quite good, except the embarrassment caused by mechanical hindrances of the enlargements; temperature ninety-nine degrees in the afternoon, pulse seventy. Here is a problem and who can solve it? This strong, healthy young man was infected from an abrasion, which healed slowly, leaving a rough, stringy-like cicatrix, its behavior being very similar to that of scrofula. The disintegration of the one large one and several smaller infiltrations stood in direct and unmistakable relationship to the specific toxin administered. We know quite well that the therapeutic action of the culture products is limited to tubercle alone. This being true, this case, though fulfilling every requisite and presenting every phase of a typical case of Hodgkin's disease, was, in reality, lymphatic tuberculosis, if not, however, it presented a clear case of the association of the two diseases. This leads me to suggest that, notwithstanding the classical essays in lymphadenoma, this disease may be a heretofore undescribed form of tuberculosis, in which the bacilli initiate the lesion and then pass out through the lymph avenues, which we know remain patulous until the infiltration has assumed rather large proportions. This is one condition which does not exist in scrofula; in the latter disease the initial lesion involves, in fact is primarily in, the lymph spaces, and hence they are immediately choked up; this obstruction being responsible for the peripheral infiltration. Even in scrofula but few tubercle bacilli are found. Why then should it be unreasonable in lymphadenoma where the lymph spaces are open for all the bacilli to escape? This is at least as logical as to ascribe the etiology to antecedent diseases, such as "syphilis" or the old hobby "heredity."

In Hodgkin's disease the change first noticed in the gland is an increase of cells, and there may or may not be thickening of the reticulum, eventuating in a simple hyperplasia. On section the tumors have a grayish white appearance of variable consistence, being either hard and dry or soft and filled with fluid. Suppuration, like that in true scrofula, occurs where growths impinge against the skin. Caseation is occasionally found and small necrosed areas have frequently been described. In true tubercle we find the first changes to be likewise a cell multiplication.

This is about all we know of this fatal disease. As to its etiology



our best authorities are at sea. As is well known, Hodgkin, the morbid anatomist of Guy's Hospital, was the first to give an accurate description of this pathological condition. His work was carefully gone over and found authentic by Virchow, Billroth, Cohnheim, Wilks and others. So far, however, as I can find, no definite or even reasonable causative factor was pointed to which stood in constant or even occasional relationship to the disease. Murchison, as far back as 1870, called attention to the periodical fevers constantly attending all stages of these growths. Gowers, Ebstein, Pel and others confirmed this fact. Later on Schur, Sternberg, Askanazy and Musser reported many cases of so-called Hodgkin's disease, which presented perfect clinical pictures, as given by Hodgkin himself, which, upon examination of the discharges, showed them to be tuberculous. Autopsies more fully confirmed the microscopical findings of the discharges from suppurating areas. More recently still, Sternberg and Musser have given it as their candid opinion that the adenitis of Hodgkin's disease is always of a tuberculous origin. Among those who still hold to the teachings of Virchow, Billroth and others, that the disease is a distinct entity, is Reed of Johns Hopkins. (See reports of 1902.)

Notwithstanding there is gradually being evolved a consensus of opinion that the tubercle bacillus is the constant attendant factor in Hodgkin's disease, no one has yet, so far as I can ascertain, attempted a rational explanation of the divers pathological behavior found in this disease. From this fact may it not be possible that we have here an erratic and unrecognized form of glandular tuberculosis which presents colossal manifestations under peculiar and unknown pathological conditions? If this be correct, further research into the histogenesis of tubercle may solve this vexatious problem. The clinical tests of the above case, with the toxins of the tubercle bacilli, so far as local and general reactions were concerned, were in no way different from that in ordinary lymphatic tuberculosis. The preparation I use—watery extract of tubercle bacilli (vonRuck)—has direct therapeutic effect upon all glandular infiltrations of a tubercular character, but on no other pathological condition. Therefore, if reactions occur in any case of supposed Hodgkin's disease from the administration of this preparation, one of two things is certain, viz: The case is either

wholly or in part tuberculous, making due allowance for the possible association of two diseases which may be so intimately allied as to be indistinguishable.

As a prophylactic measure against such enormous glandular enlargements resulting from the adenitis of the so-called Hodgkin's disease, I suggest the early removal of all scrofulous glands by the hypodermic injection of the culture products. In all such cases the infiltrations may be disintegrated and absorbed, as I have fully demonstrated on forty-seven cases during the last five years.

---

---

## Louisiana State Medical Society Proceedings.

---

[EDITED BY PUBLICATION COMMITTEE.]

P. L. Thibaut, M. D. Chairman.

---

### **The Injustice which Physicians do Themselves and their Patients, in too Frequently Prescribing Proprietary Medicine.\***

By C. J. DUCOTE, M. D., Cottonport, La.

Several months ago when the Chairman of the section on *Materia Medica*, Pharmacy and Therapeutics invited me to make a contribution to his section, it occurred to me that a proper subject would be "The Injustice Which Physicians Do to Themselves and Their Patients in Too Frequently Prescribing Proprietary Medicines." Therefore I immediately sent to him the title of my paper, thinking I had ample time during the few remaining months to collect data for my subject. In this I was mistaken, and beg your indulgence for shortcomings. At the beginning I wish to say I have no intention of exhausting this most important subject, but, on the contrary, should I succeed in bringing out a full and thorough discussion, I shall consider myself well paid for whatever time and labor I may have expended in the matter.

The thanks of the profession are due to Dr. William J. Robinson, New York City, for his paper, "The Composition of Some So-called Synthetics and Ethical Nostrums," read at the fifty-fourth annual session of the American Medical Association, in the section on

---

\* Read by title.

*Materia Medica*, *Pharmacy and Therapeutics*, and published in the *Journal of the American Medical Association* in the April 16 number, '04.

The doctor enjoys the distinction of being a pioneer in that line of thought and action. He is the first one to raise his voice against this pernicious practice, and all true and conscientious physicians should be grateful to him. He has given the alarm and it is left to the profession to ward off the approaching danger.

While I yield to no one in giving Dr. Robinson proper credit for his paper, I must differ with him when he says: "I do not attack all patent or proprietary preparations. Not at all. Our first duty is to our patients. If a patented preparation will do our patients more good than an official one, let us prescribe it by all means, regardless of the fact that the manufacturers are making a good profit out of it."

I care little what profit manufacturers make out of their patent medicines, but I do not think it proper for physicians to prescribe them under any circumstance. I should consider it very unethical for physicians to prescribe anything with whose composition they are not acquainted. Besides, there is no necessity for physicians ever prescribing them, for the reason that, out of the long list of drugs enumerated in the dispensatory, something can be found to meet the indications. The fact that physicians prescribe patent medicines puts them down as being unworthy of the title of doctor, for the word doctor means a person learned in his profession, at least, in *Materia Medica* and *Therapeutics*.

I beg your pardon, gentlemen, for this digression; my paper is against the too frequent use of proprietary preparations, and not against the use of patent medicines, for I was not aware that physicians used them at all, until I read Dr. Robinson's paper.

My remarks are not applicable to physicians living in towns and cities where there are drug stores. It is presumed that physicians practicing in such places seldom, if ever, prescribe proprietary preparations. The well-assorted drug store and the competent druggist behind the counter can supply their need. My remarks will apply to the country practitioner, like myself, who has to be his own druggist and is, consequently, at times, forced to prescribe proprietary preparations, for he has neither the drugs nor the time to compound such prescriptions as his patients might need.

I contend that the too frequent use of preparations under dis-

cussion works an injury to physicians and patients. I do not call "the prescribing of these preparations, practicing medicine;" it is empiricism, pure and simple. They are used for the reason that someone recommended them for certain diseases. The moment a physician gets into the habit of prescribing these proprietary preparations he loses his identity; he is not prescribing himself; he lets the manufacturer do that for him. By pursuing this pernicious practice he soon falls into the proverbial rut and eventually finds the manufacturer not only prescribing for him, but diagnosing his cases.

It strikes me that 'way back in the seventies we did not have so many elegant preparations, yet we got along very well. In those days we examined our patients thoroughly, diagnosed their diseases and prescribed drugs for them which were indicated, and in that way gave our patients the benefit of our knowledge of the medical properties which these drugs possessed.

The prevailing habit now is to examine superficially and prescribe somebody's preparations, for the reason that it is more convenient and it does not taste so badly. I do not call that practising medicine scientifically.

Dr. McBride's paper, "Fewer Drugs and a More Thorough Understanding of Their Physiological effects," has the proper ring. We are too prone to lay aside drugs with whose effects we are thoroughly familiar and take up some new ones of which we know little or nothing.

---

### **The Antiblennorrhagic Drugs in Gonorrheal Urethritis; the Question of their Value.\***

A. NELKEN, M. D., New Orleans.

Consultant Genito-Urinary and Venereal Clinic, Touro Infirmary.

The term "antiblennorrhagic," which in its literal sense has a very broad application, is restricted by usage to that group of the volatile oils which administered internally are supposed to exercise a curative influence in gonorrheal urethritis.

While the list is a fairly long one, present practice confines itself almost exclusively to the administration of the oleoresins of copaiba and cubebs and the oil of sandalwood in this disorder.

---

\* Read by title.



Copaiba was long considered as the most efficient member of this group of drugs. It is the one which has been most employed, and, therefore, the one which has been most subjected to criticism. Sandalwood oil is possibly the most popular of the antiblennorrhagic drugs of today.

The reason for this can be found in its less disagreeable effect on the digestive organs as compared with copaiba, but especially in the elaborate advertising it has received, both in the lay and medical press, from the manufacturers of a French preparation prepared by Midy's process from freshly-felled Mysore sandalwood.

A number of reputable drug concerns have now on the market, and advertise extensively to the medical profession, special formulæ in which are combined cubebs, copaiba and sandalwood oil—methylen blue being usually added so that, as one manufacturer candidly put it, the patient "may see that the medicine reaches the spot."

To those with whom age is synonymous with venerability it may seem like sacrilege to suggest even a suspicion as to the efficiency of these drugs in the condition for which they have so long been employed. But the practice of today has so many lines broken away from the shackles of a stagnant past that agnosticism in reference to the medical faith of our fathers has become a virtue rather than a vice.

The use of these drugs in gonorrhea is unintentionally a concession by the regular practitioner to the doctrine of "*similias*," for in large doses they are capable of giving rise in a healthy individual to the vesical tenesmus and burning, painful, frequent urination which are classic symptoms of the severer type of urethral infection.

It is granted that these drugs are eliminated largely by the kidneys and tend to delay putrefaction changes in the urine. According to Cushny the therapeutic agent is the volatile oil, the resin having little or no antiseptic action.

That even in dangerously large doses they render the urine antiseptic enough to destroy pus cocci is very questionable indeed.

The discovery of the gonococcus by Neisser, in 1879, pointed out the importance of local treatment in specific urethritis. Since that time internal medication has held a secondary position in this affection.

But in medicine, as elsewhere, there is a rooted dislike for iconoclasm. And so plausible are the arguments of enthusiastic doctors and more enthusiastic manufacturers and (we might add) so many drugs and methods have proved disappointing in the local treatment of gonorrhea, that nauseous doses of copaiba, cubebs and santal are prescribed almost as freely by many practitioners today as they were by the doctors of fifty years ago. A single drug firm reports a sale of one of their special formulæ during the past year exceeding \$100,000.

It is unusual to pick up a book treating of urethral disorders in which the administration of these drugs is not advocated.

A cloud of medical witnesses testify to their therapeutic efficiency.

Courage—or perhaps it is rashness—is required to question the mass of clinical evidence which has accumulated during the last 500 years. Nevertheless, there are men of large experience and of unquestioned ability who have not hesitated to deny the therapeutic virtues of the antiblennorrhagic group of drugs.

Milton, who was a recognized authority on gonorrhea, said as far back as 1876: “Copaiba is one of the most nauseous drugs ever found out. It is quite time that men banish it from the therapeutics of gonorrhea.” He likens cubebs to copaiba and says of sandalwood oil that his faith in its virtues did not improve on acquaintance.

Fessendent N. Otis<sup>1</sup> said: “I have long been satisfied that the treatment (of gonorrhea) by so-called specific internal remedies is always more or less pernicious in its effects on the digestive functions. I have seen several cases of congestion of the kidneys brought on by the use of balsam copaiba in doses ordinarily prescribed.”

Stockwell<sup>2</sup> while leaning towards cubebs and sandalwood oil in certain conditions in gonorrhea, says of copaiba: “It is much overrated and its real merits are nowise compensatory for the nausea and vomiting and disagreeable sequelæ that follow in its track.”

The entire subject is succinctly covered by Wm. K. Otis<sup>3</sup> in a recent publication. He says: “The employment of internal remedies in the treatment of gonorrheal urethritis with any idea of affecting the course of the disease is worse than useless. Among such

---

<sup>1</sup>Gonorrhea and its Sequelæ (833).

<sup>2</sup>Sajous' Encyclopedia.

<sup>3</sup>Reference Handbook of the Medical Sciences.

remedies may be mentioned cubebs, copaiba, sandalwood oil, oil of turpentine, etc., drugs which have been handed down by an effete empiricism, and the administration of which may be followed by anorexia, vomiting, diarrhea, cutaneous erythemata and chronic gastritis."

Any virtue the so-called "antiblennorrhagic" drugs may possess must manifest itself through their elimination in the urine.

In large doses they may produce congestion of the kidneys and even complete suppression. It is only reasonable to suppose that smaller quantities, long continued, have a deleterious effect on these vital organs, and where renal disease already exists may precipitate a grave condition of affairs. The literature on the subject details a large number of cases where this actually occurred.

The average man hardly consumes five minutes out of every twenty-four hours in urination. Ten minutes would be a liberal allowance. Does it not then seem irrational practice to keep a patient's system constantly saturated with nauseous, disagreeable, even dangerous drugs in order to secure local action on a few inches of a diseased mucous membrane for so brief a period?

The affirmative answer to this question is emphasized when we consider the questionable virtue of the drugs employed for the purpose, and moreover, how readily accessible the affected region is to local measures.

The advocates of internal "specific medication" in gonorrhœa can point to innumerable cures when this was the only method of treatment.

They confuse *post* with *propter hoc*.

The average practitioner has not an adequate appreciation of the essential self-limited nature of acute gonorrhœa. And in chronic urethral disease we should not forget the sage observation of Thiry: Everything earthly has an end—even a gleet.

As has just been remarked, iconoclasm in therapeutics is not a position of honor.

But after a considerable experience with these drugs, both in my own practice and in the practice of others, it is my opinion that no member of the so-called antiblennorrhagic group of drugs has the slightest therapeutic virtue in acute or chronic urethral disease, and that their administration in sufficient dosage to influence the urine, may give rise to grave constitutional and local disturbance.



## **Cholelithiasis, with Especial Reference to Its Diagnosis and Medical Treatment.\***

By J. A. STORCK, M. D., M. Ph.

Professor of Diseases of the Digestive Apparatus, New Orleans Polyclinic, and Visiting Physician to the Charity Hospital, New Orleans.

Since the finding of stones in a gall bladder by Gentilis of Foligno in the fourteenth century up to the present day, the study of the origin, chemistry, pathology, etiology, diagnosis, prognosis and treatment of this condition has occupied the attention of some of the best minds in medicine. The many-sided phases of gall-stone disease require close study and considerable clinical acumen. Meckel von Hensbach, following an idea of Morgagni, was the first to call attention to the role played by chronic catarrh of the mucous membrane of the gall-bladder and bile-passages in the production of gall-stones.

Bristowe is of the opinion that cholesterin, one of the principal constituents of gall-stones, is formed from the disintegration of the epithelial cells lining the gall-bladder and the bile ducts. Nunyn holds that the diseased mucous membrane excretes a large amount of calcareous matter, which causes a sediment often found in human bile. This sediment consists of flaky, granular, brown or yellowish pultaceous masses, containing cholesterin, bilirubin, calcium, and alkaline salts of bile acids. If an inflammation of the mucous membrane occurs, and a center of crystallization is present, a seed, needle, silk suture (Homans & Kehr), etc., there is, with a thickening and stasis of the bile, everything necessary for the formation of the gall-stone.

That micro-organisms, also, are a prime cause of stone formation seems to be well founded. These micro-organisms belong chiefly to the colon and bacillus typhosus groups.

That the bacillus typhosus plays an important role in the production of gall-stones seems to be proved by the work of Chaufford, Ehret and Stolz, and Cushing. In a case of cholecystitis, Richardson found typhoid bacilli clumped, "as if a gigantic serum reaction had taken place in the gall-bladder." Hanot and Milan, also Gilbert and Domenici, found bacillus typhosus in the center of recently-formed gall-stones. Cushing, Gilbert and Fournier produced biliary concretion by injecting typhoid bacilli into the

---

\* Read by title.



gall-bladder of rabbits when there was restriction of motility. That gall-stone frequently follows cases of typhoid fever is well known. In my own practice, I have histories of twelve such cases.

Stasis of the bile aids the growth of the bacteria, and increases the virulence of the bacteria already present. In cases where the bile flows freely, the patient is more likely to escape the formation of gall-stones than if stasis of the bile takes place. This would argue that intestinal antiseptics, and the prevention of stasis and thickening of the bile, constitute rational treatment in typhoid fever. It is probable that micro-organisms find entrance into the gall-bladder by way of the intestines.

Gall-stones are composed of numerous substances, the principal of which are cholesterin and bile-pigment (particularly bilirubin) in combination with calcium and carbonate of calcium. The small dark stones, consisting chiefly of pigment and calcareous salts, are found principally in the ducts. They are hard and are the most difficult to get rid of by means of medication. The lighter colored and often larger stones are sometimes almost pure cholesterin. These stones are softer and are more readily gotten rid of. The color of the stones depends upon the amount of pigment which they contain. The shape of the stones varies according to number and origin. The shape is rarely due to grinding, but more likely to compression, as the layers are for the most part uniform. The size and shape of the stones bear an inverse ratio to the number present. There is usually more than one present: 5,000 is recorded by Nunyn in one case; 300 is the largest number which I have seen. The size varies from grain-like bodies and the size of peas to 2 and 2 1-2 inches, as recorded by Frerichs; Richter records one weighing three ounces, five drachms. Fresh stones will not float on water, but when dessicated and containing air bubbles they will; therefore, the old method of mixing the feces with water and when no stones were found floating, pronouncing against their presence, is fallacious.

Frequently the stones in the gall-bladder are free and suspended in fluid; and again, they are adherent to the walls of the gall-bladder. The walls of the gall-bladder often become ulcerated and perforation takes place; thus, the stones find their way into the neighboring organ.

In contracting, fissures are formed and the stones break up.

This mechanical process, together with the solvent action of the bile, causes them to dissolve. In hydrops of the gall-bladder, we may also see a destruction of gall-stones following the changes in the nature of the fluid contents of the gall-bladder. It is probably in such ways as these just mentioned that patients are sometime freed of their gall-stones. As stones are sometimes<sup>2</sup> found in the common duct which could not have passed<sup>1</sup> the cystic duct we are led to believe that stones enlarge after they enter the bile-ducts, or may have been formed there.

The frequency with which gall-stones are found at autopsy varies. For instance, Poulsen (Copenhagen) found them in 37 per cent; Brockbank (Edinburg), in 4 per cent; Roth (Basel), in 9 to 10 per cent; and the Rush dissecting room, in 16 per cent. In New Orleans, we have no data based on a large number of cases.

In old cases of cholelithiasis, the gall-bladder is often contracted tight about the concretions. The sensation compared to the feeling of nuts in a bag exists rather in the the imagination than in reality.

At times the lumen of the cystic duct is occluded, when hydrops vesicæ may occur. Gall-stones do not often lodge in the hepatic duct, for the reason that this passage grows wider as it approaches the common duct.

In the course of cholelithiasis catarrh of the mucous lining of the bladder, with all its consequences, may result.

The various inflammatory processes may cause adhesions with neighboring organs, hepatitis may occur, and the cystic and common ducts may become embedded in a mass of solid cicatricial tissue.

The entrance of pus-forming organisms in the bile passages during the course of cholelithiasis causes a suppurative cholangitis, and such other conditions as necrosis of the mucosa, ulceration, perforation, and the passage of gall-stone into the surrounding tissue. If perforation of the large bile passages occurs, general or circumscribed peritonitis may result; if perforation into the intrahepatic bile passages takes place, abscess cavities will be formed within the liver. It is claimed that carcinomatous degeneration of the bile passages or of the gall-bladder may result from gall-stone disease.

In ulcerative processes occurring in the gall-bladder, perfora-

tion into the free abdominal cavity may ensue, but this is rare. *Fistulæ* may result, and large concretions pass from the bile passages into the intestine. Gall-stones may also perforate from the bile passages into the portal vein.

As a result of infection of the gall-bladder and bile passages cholecystitis and cholangitis may result.

The so-called prodromal symptoms in cholelithiasis have little, if any, value. As a rule, uncomplicated cases of cholelithiasis cause no distress. Thousands of cases (95%) suffer no inconvenience whatever so long as there is an absence of inflammation, and the stones remain quiescent. The patient may complain merely of a dragging feeling or sensation of heaviness in the hypochondriac region. This sensation may change its location with change of position, becoming particularly annoying if the patient sits or stands a long time, and especially so toward the end of gastric digestion. A dull pain is sometimes complained of, referable to the right portion of the epigastric region and radiating towards the hypogastrium, the thoracic organs, the right shoulder, the head, the neck, or the lumbar region.

While the pain, as aforesaid, is often very slight, yet again it becomes so severe that even the strongest cry out. These attacks come suddenly when the patient is well, sometimes after exercise and the taking of food; not infrequently after an attack has passed off, a dull aching is felt in the region of the gall-bladder for some time, perhaps still another seizure. When the stomach is adherent to the gall-bladder, it is noticed that the pain begins on the left side over the stomach. As to character, the pain may be irregular, at time simulating *angina pectoris*, and being almost limited to the pre-cordial region; or epigastric, simulating ulcer of the stomach; or genito-crural, and resembling renal calculus. In cholelithiasis, nervous disturbances may be present, such as great irritability, depression, and a feeling of oppression in the epigastric and precordial regions. Disturbances of sight and hearing, and coryza, headache, migraine neuralgias, as also itching and burning, may be complained of. The appetite is at times capricious, anorexia, alternating with bulimia. Errors of diet often cause vomiting of bile-colored masses.

The vomiting may be continuous, but, as a rule, it is paroxysmal and associated with colic. The question of controlling the vomit-



ing is, at times, a difficult one, as the vomiting continues in some patients even after the cause is removed. In the great number of cases, it occurs toward the end of the seizure, and, in fact, frequently determines its cessation. In such cases, the stomach contents are first rejected, after which, if the common duct be free, bile is vomited; at times in the severe cases, vomiting becomes grumous, or even stercoraceous.

In chronic cases of gall-stone disease, during attacks of colic, tumor may be noticed. This is due to the violent contraction of the muscular wall of the gall-bladder on its contents.

Jaundice as a system of cholelithiasis is not considered of so much importance as formerly, as it is present in only 20 per cent of the cases—a fact which should be borne in mind. When present, it usually makes its appearance about thirty-six hours after the beginning of the attack of colic and while the gall-stone is in the common duct. So long as the stones remain in the gall-bladder or cystic duct, the flow of the bile is not impeded. Sometimes the stone finds lodgment in the common duct, but does not completely occlude the lumen. An intermittent jaundice sometimes occurs, the stone acting as a ball-valve in the common duct. If the bile be thin and can pass the obstruction, no jaundice takes place. Indeed, jaundice is sometimes present to such a slight extent that it may be overlooked, unless a very careful examination be made.

Jaundice may also be caused by a severe functional disturbance of the liver cells themselves. Minkowsky says that a disturbance of the liver cells may occasion a passing of the bile constituents into the blood or lymph vessels, without a mechanical obstruction to the flow of bile. Liebermeister calls this form of jaundice “akethektic, or diffusion, icterus.” Pick named it “parocholia.” It is well to remember this form of jaundice; for, if after operation, no stone or other obstruction is found and the jaundice persists, we have, in the explanation mentioned above, a rational interpretation of the phenomenon.

Many disease conditions are confounded with cholelithiasis. Among these are: right-sided floating kidney, acute, non-calculous cholecystitis, renal colic, gastralgia, enteralgia, nervous hepatic colic, lithiasis pencreatica, congestion of the liver, multiple abscess of the liver, cirrhosis of the liver, subdiaphragmatic abscess, dia-



phragmatic pleurisy, pneumonia, perforation of the bowel, intestinal obstruction, malignant growth in or near the liver, carcinoma of the gallbladder, lead colic, pyloric or duodenal ulcer, peritoneal adhesions to the pylorus or bowel, and spinal neuralgia. Appendicitis may also be mistaken for cholelithiasis when the appendix is turned upwards. Among the frequent concomitants of cholelithiasis are adhesions and pyloric stenosis; troublesome stomach derangements; pancreatic disease in 66 per cent of the cases according to estimates made by Kehr and Paul Fuchs; occlusion of the bile passages by impacted stones; hydrops of the gall-bladder; permanent icterus with a consequent cholemia, if the ductus choledochus is occluded; permanent occlusion of the common duct, brought about by pressure of the gall-bladder; symptoms simulating typhlitis when stones become impacted in the ileocecal region; diabetes mellitus; and fistulæ between the gall-bladder or the common duct and the duodenum. In infections with bacillus coli, purulent inflammation of the peritoneum is frequently seen. The prognosis of cholelithiasis in uncomplicated cases is favorable, as the disease usually runs its course without any disturbance. Where there is evidence of inflammatory and ulcerative processes, the prognosis should be guarded. With high intermittent or remittent fever, and when stones become impacted within the common duct and cause permanent obstruction to the escape of bile, the prognosis is bad. If circumscribed peritonitis appears; if empyema of the gall-bladder, suppurative cholangitis, or abscess of the liver, complicates the disease; if there is impaction of the stone in the intestine causing ileus perforation into the peritoneal cavity; and, if carcinoma is present—the prognosis is also bad.

Cholelithiasis occurs more frequently in women than in men. Hein found that the relative frequency is as 2 to 3. In a measure this is due to their different modes of dress, habit, environment, etc.

While it may occur at an early age, it is usually a disease of past middle life. Rother (Munich) states that the following relations exist between the age of the subject and the prevalence of gall-stones: one to thirty years, 3 per cent; thirty-one to sixty years, 6.9 per cent; sixty-one and over, 19.2 per cent.

The disease is more frequent in some localities than in others,

due probably to different habits of life, etc. For example, Schröder in Strassburg, found them present in 25 per cent of people over sixty; Roth in Munich, in only 19.2 per cent; and Peters in Kiel, in the yet smaller degree of 11 per cent. Post mortem records on persons of all ages and both sexes prove gall-stones to be present in from 5 to 10 per cent of all Europeans. The records of the Rush dissecting rooms show the presence of gall-stones in 16 per cent of all subjects.

Uncomplicated cholelithiasis is often an obscure disease, difficult of diagnosis and manifesting itself in only a small per cent of its victims.

By accident, it might so happen that while examining a patient's abdomen the physician might detect the presence of gall-stones, without the slightest previous suspicion of their existence on the part of the patient; or, the patient might accidentally discover concretions in his stools. But, with the larger proportion of cases, pain, which always occurs abruptly, is the signal which causes them to seek medical advice.

The pain, a colic, may be slight, severe, or agonizing, and is caused by inflammation, plus infection in the gall-bladder, the cystic duct, or the common duct.

All pain in the epigastrium and the right hypochondrium should lead the physician to examine the regions carefully.

When a stone is lodged in the cystic duct, then there is super-added the pain of obstruction. If it passes out through the common duct and the papillæ of the duodenum into the intestine, or passes into the gall-bladder, the pain is relieved. The attacks are variable, lasting from a few hours to a week or even longer, with remissions and exacerbations until the stone is expelled.

During this stage, there may be a temperature of 101 to 103° F.; there may be an enlargement of the liver, with nausea, vomiting and jaundice; also, drenching sweats, rapid pulse, and, occasionally, convulsions and syncope.

The history of previous attacks, a suggestive history, and the finding of gall-stones in the feces, give positive evidence of cholelithiasis.

While jaundice is evident in only 20 per cent of gall-stone cases the presence of bile can be detected in the blood-serum in a much larger per cent of cases. In this connection the blood-serum test

of Dr. Hamel deserves mention. He advises an examination of the blood-serum in suspicious cases. His method is to fill a small capillary tube with blood from a puncture in the lobe of the patient's ear, and then to seal the tube at both ends. After standing for a few hours in a vertical position, the serum separates from the blood clot, and then can be examined against the light. Normal serum is colorless, whereas the slightest trace of bile is revealed by a yellowish tint varying in depth with the amount present. This test should be applied in every obscure case of gall-stone.

The taking of skiagrams of gall-stone requires some skill in X-ray work. The early attempts of workers in this field was not satisfactory, but Beck, with improved technique, has recently obtained clear skiagrams of biliary calculi.

An examination of the stomach contents usually shows a deficiency of the hydrochloric acid, and often the presence of bile in varying quantities.

The urine often contains bile-coloring matters, and, when it does so, as a rule is abnormally colored. It froths on shaking, and the bubbles are yellowish or yellowish-green.

In my practice, I use one of the following tests for bile in the urine: Rosenbach's modification of Gruelin's test; or Hupfert's, or Hammarsten's reaction. Stokvis' reaction may be used as a control. These tests are reliable. I have had no experience as yet with the fuchsin test, as suggested by Dr. Bandonia of Tours; nor with the methylin blue test of Dr. Duncan.

In every case of suspected gall-stones, the urine should be carefully examined by one of the processes mentioned above. The feces should be examined for stones; their presence is valuable evidence but their absence does not negative cholelithiasis. It is well to mix the feces with water, allowing the mixture to stand, and gently stirring it from time to time. Then pass it through a fine sieve, or arrange a ring with bobinet on the closet and wash the feces.

The feces should also be observed for color; upon the exclusion of a milk diet, clay-colored or light stools argue in favor of obstruction.

Musser found leucocytosis in all the cases of gall-stone which he had seen.

The preventive treatment of gall-stone resolves itself into a ques-



tion of attention to diet, exercise and general hygienic surroundings. Women, for instance, using too tight lacing, sedentary life, want of proper exercise, eating of rich food, suffer from constipation, and are the most numerous victims of gall-stone. Tight clothing should be forbidden, and warm baths, fresh air and regular exercise indulged in. The use of alcohol should be forbidden, rich dishes and sweet and starchy food should be restricted, even withdrawn entirely, if necessary. The taking of quantities of water lessens the liability to the formation of gall-stones by making the bile more fluid.

The disease of cholelithiasis which is at first a medical, often becomes a surgical matter. Its medical treatment has the sanction of no less distinguished surgeons than Kehr and Mayo Robson. Kehr says: "I have from the first taken this stand, and have always been of the opinion that certain cases—I recall only the acute sero-purulent cholecystitis—belong without question to the surgical clinic, whilst again others—I have in mind especially the cases of jaundice and expulsion of stones—can find in the hot sprudel relief from their suffering, and perhaps also complete cure.

Further, he says: "I cannot by reason of that which my private practice teaches, free myself from the conviction that cholelithiasis is a disease which, in far the greatest majority of cases, runs a favorable course even without surgical interference."

Mayo Robson says: "After medical treatment has been fairly and fully tried and failed, all are now agreed that surgical measures should be resorted to."

"The internist therefore has good ground when he contends that he has a right to treat cholelithiasis.

As it is at the hands of the internist that the gall-stone cases first seek treatment, it behooves him, therefore, to be ever watchful; and, particularly so, as we have before pointed out, since the discovery of the disease is often accidental. An attack of gall-stone colic may first acquaint the patient with his condition, and it is at this time that the physician's service is called into requisition. The victim wants immediate relief from what, in the majority of such cases, is described as agonizing pain.

As movement of the body and the taking of food may increase the pain, rest in bed is the first indication, no food or drink other than hot water or milk being allowed. A hot flaxseed poultice



may be placed over the region of the liver; but, as some patients are more benefited by cold, I use cold applications in those cases.

Then twenty drops of compound spirits of ether in a half drachm of spirits of chloroform should be given, and the dose repeated every twenty minutes until three doses have been taken. If the line of treatment described above fails to give relief, sulphate of morphin given in  $\frac{1}{4}$  gr. doses combined with 1-150 gr. of sulphate of atropin by needle is called for. Since absorption by the stomach is slow, never give morphin by the mouth. The same thing holds good in a measure with regard to the administration of morphin by the rectum.

Should it happen that even the morphin fails to give relief, ether or chloroform may be used to mild anesthesia, which, while lessening spasm, favors the passage of the stone. When the colics recur at short intervals and are severe enough to call for the continuous use of morphin, I advise surgical interference. Under no circumstance should the patient be allowed the use of the hypodermic syringe for the purpose of injecting morphin. After the attack of colic is past, the physician should go over the patient carefully to try to determine the character of the trouble; whether inflammation be present, or not; and whether the stone is located in the gall-bladder in the cystic, or common duct, or in the intestines.

It is safe to use a home Carlsbad treatment on every uncomplicated case. The following is my mode of procedure: The patient gets up about six o'clock in the morning, and before taking any food sips a glassful of hot water containing one or two teaspoonfuls of the so-called genuine Carlsbad sprudel salt. Regulating the quantity according to the effect produced on the bowels, sometimes several such glasses may be taken. This line of treatment accomplishes a good purpose, as it favors the subsidence of cholecystitis when present, and promotes regular evacuation of the bowels. By increasing peristalsis it aids in the passage of the gall-stone. During the time of sipping the water, if the patient continues in motion (walking), the action of the salts seems to be promoted. Soon after sipping the hot Carlsbad water, the patient is allowed a little black coffee and a roll without butter. High enemata of hot water also have a beneficial effect on these cases; likewise hot baths, 40°C, 104° F., taken daily. The Carlsbad salt treatment can be used two

or three times daily, and should be continued for two or three months if the patient is robust enough to stand it. When the means of the patients allow a trip to Carlsbad, I advise it as soon as they have recovered from the acute attack.

After the acute attack, olive oil should be used. The use of oil in the treatment of gall-stones was first advocated in the eighteenth century by Friedrich Hoffman, who used almond oil. According to Virchow and Thomo, who claim that olive oil as such enters the gall-bladder, its use is rational. Laboratory experiments have shown that gall-stones are soluble in olive oil and, further, that after losing considerable of their weight (68%), they break up into small pieces. While every case in which olive oil is administered is not cured, or even benefited, the fact remains that many patients are relieved of their pains, and even of their inconvenience. Often after its persistent use, gall-stones that were easily demonstrable before cannot be detected. Again, it is conceded by some that on operation after the olive treatment, the stones are more pliable. Dr. Brockbank's theory as to the action of olive oil is that "a digested fat passes into the circulation from the alimentary canal in three forms—as an unchangeable fat, as the corresponding fatty acid, and as soap. As cholestrin is soluble in oil, fatty acids and soaps, the rational of olive oil administration is obvious.

I have obtained most excellent results with a combination of Durande's mixture modified—ether three parts, spirits of turpentine one part. Of this, use fifteen drops in half an ounce of olive oil three or four times daily, according to its agreement with the stomach. Along with this, I advise the taking of olive oil combined with food, such as salads, etc., the amount of oil taken daily ranging from four to twelve ounces. The use of ether and spirits of turpentine with olive oil is theoretically correct, as cholestrin is soluble in both, and both are excreted by the bile.

With oleate of soda (Eunatrol), I have had little experience. The use of bile or glycocholate of soda by the mouth might prove helpful in some cases.

The question concerning the possibility of dissolving gall-stones in situ has recently been investigated by Vaughn, Harley and Wakelin Barratt. They inserted large gall-stones into the gall-bladder of healthy dogs with antiseptic precautions, and found that, in periods from six months to one year, the gall-stones had

entirely disappeared, thus showing that the healthy bile of the dog is capable of dissolving cholesterin. It is evident from the experiments mentioned that by the administration of bile or glycocholate of soda, it may be possible to dissolve gall-stones in the bladder.

In cases where an antispasmodic is indicated extract of belladonna and podophyllin resin, a quarter grain of each, seems to relieve the spasmodic contractions of the muscles, thus promoting the expulsion of the gall-stone.

If the patient is very weak with small and rapid pulse, brandy, or champagne should be administered. Camphor given hypodermically,  $1\frac{1}{2}$  grains in oil, is very useful. The vomiting which is at times troublesome, is often stopped by lavage of the stomach with hot water  $125^{\circ}\text{F.}$ , or with peppermint water of the same temperature.

Concerning the important subject of diet in gall-stone patients, the most suitable diet seems to be one of a mixed character containing plenty of proteid matter. It should not be too scanty or uniform, as it is desirable that an abundant quantity of bile-acids be produced so that the flow of bile may be stimulated and maintained. It is better that meals should be taken three hours apart rather than at longer intervals, as meals taken at short intervals helps to stimulate the flow of bile and to prevent stasis. A large amount of water should be advised; for, though water does not stimulate the flow of bile, a deficiency of water may favor thickening and stasis of the bile.

Women should wear loose corsets attached by straps to the shoulders. The skirts, etc., should be attached by buttons, and all constriction about the waist should be discarded. After eating, they should loosen the clothing and rest quietly.

Exercise, such as walking, horseback riding, running, swimming, mountain-climbing, gymnastic, etc., is good, as it favors flow of bile.

In conclusion, it is well to remember:

1. That the denser the stone, i.e., the more calcium it contains, the more difficult it is to treat by means of medication.
2. That jaundice, being present in only 20 per cent of the cases, is not to be solely relied upon as a symptom.
3. That in uncomplicated cases of cholelithiasis, medical treat-



ment is all that is necessary, and surgical interference is not called for.

4. That typhoid and colon bacilli play an important role in cholelithiasis.

5. That inflammation plus infection is the primary cause of the disease, especially when accompanied with stasis and thickening of the bile.

6. That early recognition of the presence of the disease and immediate treatment are imperative.

7. That cases requiring the frequent use of morphin should be sent to the surgeon.

8. That cases which show the presence of pus, in those where the impaction of the stone cannot be relieved by medical measures, and in those where carcinomatous changes have taken place, surgical interference is indicated.

---

## Society Proceedings.

---

### Orleans Parish Medical Society.

---

*President*, DR. L. G. LEBEUF.

*Secretary*, DR. ALLAN EUSTIS,

141 Elk Place, New Orleans.

In charge of the Publication Committee, DR. ALLAN EUSTIS, Chairman,  
DRS. JULES LAZARD and HOMER DUPUY.

---

### Inaugural Meeting.

SATURDAY, JANUARY 14, 1905.

DR. M. J. MAGRUDER, the retiring President, read the following address:

To the Members of the Orleans Parish Medical Society:

Gentlemen—A year ago, when chosen President of this body, I was profoundly impressed not only with the distinction shown me, but with the responsibility accompanying the honor.

It has been my aim to keep the Society up to the high standard attained by my predecessors, to use what influence I might have



had to more closely unify the membership and still further extend the Society's prestige.

The average attendance during the year has been larger than any former years and the interest manifested has been most gratifying.

There has been a net increase of sixteen members and there are now posted the names of eight additional applicants, showing a decidedly healthy growth.

The subject of acquirement of a domicile, which has been agitated by every administration for more than fifteen years, has been brought to a final conclusion, and tonight it is with a feeling of pardonable pride that I am able to turn over the affairs of the Society to my successor in our own home.

It has been the object of your President to acquire a convenient and creditable house and to do it in a thorough business way. Bonds were issued bearing four per cent. interest and secured by first mortgage on the property. We are now not only comfortably housed, but derive a revenue of \$600 a year from rentals and with no reasonable doubt of an increase to \$720 after this year. This, added to the amount of rent we formerly paid, \$240, will pay the interest on bonds, the taxes and insurance, and leave a surplus sufficient to retire all the bonds within twelve years.

Messrs. Clark & Kleisdorff, who have leased the lower floor of our building, have put in an excellent line of physicians' supplies.

To Dr. LeBeuf are we especially indebted for his hearty support and for the energetic and conscientious manner in which he has discharged the arduous duties falling upon him as Chairman of the Domicile Committee.

The Bank of Orleans has extended courtesies, loaned the necessary money to us at a very low rate of interest and aided your officers in many ways, for which we are deeply grateful.

To Attorney James E. Zunts we are also indebted for valuable advice in connection with the bond issue, for which he has made no charge.

We are also greatly indebted to a committee of ladies, composed of the wives or other relatives of members, for furnishing a very cozy and comfortable room for use as a conversation or smoking room and for numerous finishing touches which add so much to the appearance and comfort of our home.

The Library has been greatly improved by the addition of valuable

works purchased and by the donation by members of numerous books, notably some 1200 volumes from the New Orleans Polyclinic. A large number of current periodicals, most of which are received from the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL, are kept on file, and now that we have a quiet, well lighted and ventilated reading room, the Library will undoubtedly be put to better use.

The number of papers read during the year, while somewhat below that of the preceding year, has been all that could be desired, many of the papers showing an immense amount of work and research. While on this subject, there is one suggestion that I desire to make: That interest in the scientific program can be increased by having more papers on subjects which tend to interest the general practitioner, such for instance as symposiums on typhoid fever, influenza and pneumonia, diseases with which he is brought into almost daily contact.

Instead of a Committee on Treasurer's Report dealing with that officer's annual report, I would suggest an Auditing Committee, whose duty it shall be to meet not less than once in every three months and audit all accounts of the Society.

I would further recommend a system of vouchers such as is used by the State Society in the settlement of accounts, instead of the method now in use.

My duties have been greatly lightened and made more pleasant by the uniform support and co-operation of the Board of Directors and of the other officers, all of whom, I am pleased to say, have discharged their duties with a fidelity that deserves great credit. I wish to specially commend the system inaugurated by your Treasurer in the endeavor to save expense in the collection of dues.

Mr. George Augustin has proven a most painstaking and efficient officer and as Assistant Librarian has rendered the Society very valuable services.

And now, gentlemen, in closing, I wish to thank you for the uniform courtesy and support shown me and bespeak for my friend and successor, Dr. LeBeuf, that same exhibition of friendship and good will.

DR. L. G. LEBEUF, the incoming President, read the following address:

As it is customary for the incoming officers to make a profession

of faith in mapping out a plan of conduct on a line of work for the coming year, I wish to do so in a few words. Fortunately the subject of a building can be relegated to the past, and the only duty of your new officers in that line is to urge the prompt payment of the balance due by members of the bonds subscribed to. The excellence of the work done by the last administration can hardly be improved upon, and our only aim can be to attempt to keep up the standard attained by it. Since the organization of the Society in April 22, 1878, the aim of its officers and members has been to improve the profession in its consistent fight for the highest motives and purest ethics. Besides this most excellent scientific work has been done in the past. The two first papers read before the society in 1878, were by the late Dr. S. M. Bemiss, our honored and professor of practice, who read a paper on "Observations on Pneumonia;" and another by the late Dr. Thos. Layton, for years the president of the board of administrators of the Charity Hospital, on a history of a case of "Phosphatic Calculus Expelled Through the Vagina." Then also for years the spirit of such men as J. P. Davidson, Samuel Logan, C. J. Bickham, Joseph Jones, T. G. Richardson, Chas. Turpin, H. D. Schmidt and Albert B. Miles and many others no less famous, helped to keep up this standard. Journals all over the world as well as many text books have attested to some of this work. Even in our own decade some of our most worthy fellows, fortunately still with us, have produced work which has reached national as well as international reputation.

Matas' "Arteriorrhaphy for Treatment of Aneurisms."

Parham's "Resection of Thoracic Wall with First Demonstration of the Fell O'Dwyer in Maintaining Respiration while Pleura is Open."

Isadore Dyer for his "Contributions on Leprosy."

Joseph Holt for his "System of Quarantine," and much other work of great importance, which these few remarks could not properly renumerate.

*Noblesse oblige*, and we must keep up this proud record and emulate the standards established by our predecessors, and it is to this end and to this purpose that your new officers wish to ask your full co-operation tonight. Your confidence in them can best be attested by your willingness to support them in their determina-

tion to encourage and exhort all members in making an effort at the highest grade of original research and scientific papers.

The gentlemen whom your Chairman has approached, and who have kindly consented to serve on this important committee, have been freely consulted with, and I desire to give out the plan which has been formulated, so as to make the scientific part of our meetings more interesting and more useful to all of us. These suggestions are as follows:

1. At each meeting a medical and surgical paper shall be read.
2. We propose to have some one especially fitted, appointed by the chair, with the consent or at the suggestion of the essayist, to open the discussion on this paper at each meeting. This forces two men to prepare themselves, and helps the higher character of the discussion. The Academy of Medicine in New York and many other medical bodies follow this plan.

3. *On the day of each meeting* to get the secretary to issue printed mailing postal card notices to all the members; this to remind them of the meeting, and when practical have a line or two of syllabus of the paper on these notices.

4. To succeed in this plan, and on account of the additional work involved, your presiding officer urges prompt attendance at 8 p. m., as he hopes to be able to call up the reading of original papers never later than 8:45, allowing as much of the time as would be necessary for the transaction of all legitimate business before that.

Please remember that this Society, this building, is yours; it is your club room, your second home; if you have any stricture to make, any criticisms to offer, bring them directly here. If you have thought ill of your brother physician up to now, it may be because you did not know him well enough; meet him here now more closely and on the same footing of good fellowship and you may in a pleasant social talk with him convince him of the error of his ways, or possibly, also, you may change your own way.

*Cognosce Ipsum* is always a wise motto. The medical profession in New Orleans and the Orleans Parish Medical Society must stand for something in this community, and if we do not succeed in doing anything else this year than to increase the good feeling and to help to cement the pleasant relations of all the members in the Society by bringing on a general *bonne entente* we would have succeeded in the task that we set before us tonight.



DR. LEBEUF then introduced DR. 'E. B. CRAIGHEAD, President of Tulane University, the Annual Orator for 1905, who spoke as follows:

### **The Golden Mean of Truth.**

Dr. Craighead began his address by saying that his remarks were applicable not alone to physicians, but to all scientific workers, to all men devoted to the work of enlarging the boundaries of knowledge, or of perfecting existing institutions. Two classes of men there were who had done much to check the world's progress; the extreme conservative, on the one hand, proclaiming the do-nothing doctrine, let well enough alone, and the uncompromising radical, on the other hand, preaching nihilism and anarchy and the sweeping denunciation of all existing institutions. The speaker plead long and earnestly for a fearless, rigorous investigation of all problems—scientific, social, political, religious.

"To doubt some things," said he, "is foolish, not to doubt others is equally foolish. There can be no harm in that honest doubt which suspends judgment in want of evidence. On the contrary, we are called upon by the highest authority to think, to try the spirits whether they be of God. The lazy and the superstitious may be content to let well enough alone, may repine the God-commanded task of investigation, because it dispels their childish illusions and seats Reason at the vacant throne of fancy, but whoso lets his God-like reason rust unused, him the child of fanaticism and superstition who God regards as an unfaithful servant. True devotion chooses with utmost care its shrine. If readiness to believe be a virtue, horror of deception is an imperative duty."

In pleading for the utmost freedom of investigation, he quoted the words of John Milton, the poet, the statesman, the patriot: "Let truth and falsehood grapple, who ever knew truth put to the worst in a fair and open encounter?"

No man dare say to the scientific worker: "Thus far shalt thou go and no further." To call some truth secular and some sacred is misleading and pernicious. All truth is sacred, all truth is divine. To know the truth, to search diligently, tirelessly for the truth, is not only man's inalienable right, but highest duty. "There is no darkness but ignorance." The cruelest of all the fetters riveted on the sons of men are the fetters of ignorance and

superstition. Truth is the great liberator. "Ye shall know the truth and the truth shall make you free."

Medical science has progressed only as man has advanced the methods of the empyric and charlatan and sought for exact knowledge. The foolish search for the miraculous, for cure-alls, for panaceas, has been a curse to all generations of men. The enormous sale of patent medicines is standing proof of the appalling ignorance of the masses even in this scientific age. Quacks, charlatans, impostors still rob the people because they have not yet learned that there is but one panacea alike for men and nations, and that is to know the laws that govern this universe and to obey them. Nature's laws are not capricious. God is no respecter of persons. The only weapons with which to fight quackery are the weapons of knowledge. Turn on the light and forthwith the impostor flees.

Good food, sanitation, healthful athletics are better than nauseous drugs. There was a time—and that time has not wholly gone by—when physicians so-called poured down the throats of their little too-credulous patients nostrums loathsome as were ever made in witches' cauldron. There was a time not long ago when surgeons carved their way to fame and immortality—fame for the carver; immortality for the carved! Let us hope, however, that the day is passing forever. Medicine and surgery are becoming each day more rational and exact sciences. Yellow fever, cholera, tuberculosis, man has already learned to subdue and he will exterminate these and other fell diseases as his knowledge becomes more exact, as his study of causes is pursued in the spirit of true science.

---

#### MEETING OF JANUARY 28 1905.

DR. LAZARD read a paper, entitled

#### **Chancroid of Dorsum of Penis, Mons Veneris, Groin and Inner Surface of Thigh; Two Years' Duration; Cured by Grafting.**

##### ABSTRACT.

White male, age 40—Patient contracted a sore of a dorsum of penis in October, 1902. The disease continued to spread until admission to Charity Hospital, September, 1903. On admission the

disease had involved the entire dorsum of penis, the mons, the groin to about one inch to the inner surface of anterior superior spine of the ilium—about 2 inches in width, and two inches below the middle of the grain.

Soon after admission the area was curetted and actual cautery passed over it. Patient refused to be grafted. About 10 days after operation the disease had regained its original condition.

In May, 1904, an area was curetted and Thiersch grafts placed over it. The groin, thigh and mons were covered by Thiersch grafts in three sittings. The penis was covered by flaps taken from scrotum in two sittings. Patient was discharged in October, 1904. The case was exhibited to the society after recovery.

#### DISCUSSION.

DR. NELKEN said that in office practice it was exceptional to see aggravated cases of chancroidal ulceration. But those who had occasion to meet these cases in hospital clinics, among ignorant and uncleanly patients, saw not infrequently chancroidal sores rivaling cancer in malignancy. He thought that chancroids were frequently aggravated by too active treatment. This applied especially to the use of strong solution of bichloride of mercury and undiluted solutions of peroxide of hydrogen.

He had not infrequently seen cases where the chancroidal infection had spent itself, leaving a simple ulcer where too energetic treatment had made the sore indefinitely chronic. Even washing with plain water may destroy the delicate epithelium. Such cases as these were best treated by being dusted with boric acid, a non-adhesive dressing such as oiled silk applied and dressed not oftener than twice a week. Where phagedena or serpiginous ulceration complicated chancroidal infection we must not overlook the possible constitutional basis. Sometimes it is tubercular, but more commonly syphilitic. Even the best diagnosticians at times are at a loss to differentiate between the primary sore of lues and chancroidal ulcer. He had seen a case recently which seemed typically chancroidal and which refused to get well until the patient was put on the protoiodide. Every doubtful case should be given the benefit of antisyphilitic treatment. Where no constitutional basis is found and where the infection is exhausted, leaving simply an indolent ulcer, there is no reason why grafting should not be successful, and

Dr. Lazard was to be congratulated upon the favorable outcome of what must have been a very trying condition.

DR. SEXTON stated that he had seen the case that Dr. Lazard had reported and he had once cocainized and cauterized the chancroids with pure carbolic acid, followed by alcohol. He could hardly believe it was the same individual whom he had seen before and he thought Dr. Lazard deserved great praise for his excellent results in the case. He believed that the chronic character of Dr. Lazard's case was caused by poor nursing, the patient dressing himself very often. He believed with Dr. Nelken, that chancroid was often treated too energetically, but he could not coincide with the doctor's opinion that some cases should not be washed, as he had found that constant cleansing with black and yellow wash, followed by some mild dusting powder, such as calomel and bismuth, to be the most successful treatment. The case under consideration had lost its chancroidal virulence before the grafts were applied, as no kind of skin graft could be expected to either live or to take in chancroidal pus.

DR. CHASSAIGNAC stated that the result in Dr. Lazard's case was certainly excellent. The doctor was to be congratulated, but that it was more a pretty case of plastic surgery than a case of chancroid cured by grafting, as, in his opinion, this is an impossibility. The case partook more of the nature of serpigenuous chancroid than of the phagedenic variety. He did not think, as Dr. Nelken, that a particular diathesis was back of the serpigenuous chancroid, but that these chancroids were caused usually by lack of treatment, carelessness and uncleanness. Simple chancroids are often treated too violently and the majority would be cured without even cauterization.

DR. VAN WART had seen the case reported by Dr. Lazard and had been very much interested in the mental condition of the patient. When seen he was emaciated and listless, but could be aroused. At night he had hallucinations and, probably, some delusions. The case belonged to that class of mental disturbances called *infection psychoses*, which were common in typhoid fever and in pneumonia. The treatment of these conditions consists in careful attention to the hygienic conditions and forced feeding. The mental condition of this patient was improved by removal of the cause, the chronic infection.



DR. PERKINS had Ward 3 when a student at the Charity Hospital, and he knew how intractable these cases of phagedenic chancroids can become. Dr. Lazard certainly was to be congratulated upon such excellent results.

DR. FRANK D. SMYTHE of Memphis, a guest of the Society, was very much interested in the paper, and considered the result as perfect as could have been expected.

In treating chancroids, the most important point is to make an accurate diagnosis between chancre and chancroid. The first step in the treatment of a chancroid should be the conversion of the specific lesion into a healthy ulcer by the application of thermo cautery, or nitric acid. Preferably the cautery.

After this shall have been accomplished but little remains to be done. The lesion will take care of itself, resulting in recovery in from two to three weeks. The case was a beautiful one of successful plastic surgery.

DR. LAZARD, in closing, wished to thank the members for their kind criticism, and he wished to state that when he read from his paper that "when the local condition neither improved nor became aggravated," he meant that all actual infection had ceased. He believed in circumcision in cases of sub-preputial chancroid, and in fourteen cases of this character he had had but one infection, and this very slight. He wished to condemn the employment of aristol in the treatment of chancroids, and prefers the actual cautery to either nitric acid or silver nitrate.

DR. DUREL read a paper entitled

### **A Few Remarks on the Prophylaxis and Early Treatment of Pulmonary Tuberculosis.**

In considering those two factors of prophylaxis and early diagnosis of tuberculosis my intention is not to speak of some wonderful or unique case, but to remind you of a few facts overlooked and neglected by the medical profession of New Orleans. I am sorry to say that the medical profession of our great city has failed to do anything yet towards the arrest of this most dreadful disease—tuberculosis. Not only we failed to do anything against the prevention of the disease, but we too often, from gross negligence, permit our patients to drift about without the benefit of an early

diagnosis. The question now stands before us. Can we do anything to prevent the spread and propagation of this great white-plague in our great city? Other cities have given us conclusive evidence of this latter fact. The world owes eternal gratitude to Otis of Boston, to Pottenger of California, to Denison of Denver, to Ambler and von Ruck of Asheville, and to many others whom I need not mention. These men have, in their respective cities and States, and in communion with their medical confreres and medical societies, educated the public in a way to take proper care of themselves, forcing the stubborn and non-believer to submission. Why can we not do the same?

In considering the prophylaxis of tuberculosis, we must look for its cause. Here, we all know that the bacillus tuberculosis of Koch is the culprit. Now, to prevent and fortify ourselves against this microscopic, but dreadful enemy, we must know where to expect him from. There have been exhaustive discussions as to the entrance or mode of infection in pulmonary tuberculosis. Some have contended that it was mostly through the digestive tract that the bacillus of Koch entered the body; some say that it is a question of direct inhalation; others that it is purely a question of heredity and the revival of latent bacillary action; others that it is a question of inoculation. Now, we are inclined to believe, and I think that this latter view is correct, that the chief port of the entry for the *B. tub.* is through the lymphatic channels, whether the invasion comes from the upper respiratory tract or from the digestive tract. Some authors contend that long before any involvement is noticeable in the alveolar structure of the lung, the bronchial glands and lymphatic channels are already submitted to the ravaging effects of the little bacillus. Whatsoever be the gate of entrance, we must contrive some means to prevent him from entering.

What should these measures be? First, we should have fixed laws regulating the proper disinfection of all houses and places occupied by the tuberculosis. To do this, three things are necessary and wanting in New Orleans:

First—The recognition of tuberculosis as a contagious or communicable disease.

Second—the notification or report of all tuberculosis cases.

Third—The registration of all tubercular. And more, oh, yes;

we need the good will of the medical profession and of the laity, and public in general. Notification should be as compulsory in tuberculosis as it is in diphtheria, scarlatina, etc. Unfortunately, the medical profession and the laymen are opposed to this means of notification. If the public knew what to expect from the local health boards, the presence of a tubercular in a house would not be looked upon with so much dread as it is at the present day.

The only remedy for ignorance is instruction, and when the laymen hear from their medical advisor, when and where tuberculosis is conveyed, they will soon lead this movement of prevention, to protect themselves from unnecessary danger. Think of the hundreds and thousands of consumptives living together, and with no word or instruction as to the taking of the proper care of themselves. Let us demand a thorough house disinfection, after notification to the proper authorities, either by the owners or by the physician. Let these dwellings be thoroughly disinfected; let all that can be burnt be done with; all that can be boiled put on the fire; all the table utensils used by the patient should be boiled separately. All places where the patient was liable to expectorate should be disinfected. This should be done, and should be enforced by the law. A certificate of disinfection from the proper authorities, or from the local health board, should be demanded by every incoming tenant, forcing the owner to disinfect his house. I think, with others, that too much should not be left to the local health board, but that the public should learn to do a little thinking for themselves. We must, as thoroughly as practicable, destroy all tubercular discharges; avoid all tubercular food products, and contamination from patient to patient. Fixed laws for the compulsory inspection of all foods and the application of the tuberculin test in cattle, and the removal, or isolation, of all suspected animals are necessary. Of course, we are not prepared to assert determinedly that human tuberculosis is chiefly contracted from human subjects of the disease, and not from contaminated milk or flesh from tubercular animals; but, nevertheless, we should take precautions against any such source of danger.

No doubt, the chief source of infection is from the infected sputum, which becomes dry and permits the dissemination of the germs that it contains. Every living tubercular should be taught how to live; how to take care of himself. All predisposed to tuber-

cule should be taught to take proper hygienic and sanitary precautions for themselves and fellowmen.

There are two factors in tuberculosis: First, the bacillus; second, the subject upon which the bacillus can thrive. Hereditary disposition can be eradicated by proper living in the open air, by good hygiene, proper clothing and feeding. Avoidance of useless exposure is a prime necessity to any one predisposed to tuberculosis. It is not necessary that the tubercular should be quarantined, nor that he be looked upon as pestiferous, but it is essential that he be properly taught how to dispose of his sputum. Let every tubercular carry his sputum cup, or pocket cup; let him have his spittoon properly disinfected every morning; let all public places—theaters, churches, halls, meeting rooms of medical societies—be supplied with large spittoons containing water or some disinfectant, and we will soon eradicate the disease. All drinking or table utensils, used by the patient, should be boiled separately; a tubercular patient should occupy separate room to himself; he should be taught not to spit on the floor or on the sidewalks of public thoroughfares; let all excrements be destroyed and thrown away in the proper place. Let us take a glance into any of our public places—churches, theaters, etc. Let us look at the mass of poor girls and young men who have to work daily in ill-ventilated stores and workshops, and who are in daily contact with their fellow clerks, many of whom are tubercular, and are spreading their infected sputum indiscriminately over the floors of these places. All places where a set of men congregate, should be forced by law to have proper spittoons, permitting the disposal of the sputum. The sputum expectorated on the streets is less dangerous than that expectorated in dark and ill-ventilated places. The B. of tub. cannot survive long where there is plenty of sunlight and ventilation. Therefore, let us teach our patients how to dispose of their sputum; how to ventilate their rooms properly, and not to live in air-tight, closed rooms, but to live as much as possible in the open air.

The rules that I have adopted both in private and sanitarium practice are the following:

*Read carefully the following:*

*Follow the Golden Rule*—"Do unto others as you would that they should do unto you."

It is not necessary that you give the disease to others.



*Don't ever spit on any floor*—Don't ever spit on any walk, or any ground—but spit in the sputum vessels, or in your sputum cups.

Don't swallow the sputum you hawk or spit up. It is often the cause of *reinfection*. *Be hopeful and cheerful.*

*Remember*, that tuberculosis is often a curable disease. It is not difficult to cure tuberculosis in its early stages, and it is remarkable how life is prolonged in patients far advanced in the disease, but who keep up a continuous fight by living in the open air and following medical advice as to exercise, diet, and the mode of living, etc.

There is no other disease in which so much depends upon the individual efforts of the patient.

*Do not exercise too much.*

Unnatural exercises have killed many who might otherwise have recovered.

*Breathe through your nostrils, not through your mouth.*

*Dispose of your sputum as you were directed to do. Don't, in fact, spit anywhere except in the sputum vessels, or in your sputum cups.*

When you cough hold your handkerchief or a piece of cloth before your mouth.

*Keep your hands clean; don't kiss other persons on the mouth; don't shake hands with people unnecessarily.* Don't moisten your finger or thumb with your saliva when you turn the leaves of books, or count or handle money or papers.

*Wear proper clothing*—Live "out-of-doors" day and night. Have no fear of night air, and none of draughts. Court the sunshine. Be careful that you should not exercise when you should rest. Eat plenty of good, nourishing food.

*No spit; no tuberculosis.*

By having our patients to follow the above instructions they will soon become in the habit of following them, and will do so unconsciously. I have had many consumptives under my care during the past years, and I did not find it so difficult to have them follow these rules. I have followed them myself, and I feel confident that I have not, in a single instant, been instrumental in the propagation of the disease to any of my family or fellowmen.

Let us take the next subject under discussion—that of early diagnosis. Here, again, I am sorry to say that we, members of the

medical profession, are responsible for the high mortality of tuberculosis.

Were we to diagnose our cases in their very incipiency, we could obtain much better results in the treatment, and could educate our patients in a proper way to take care of themselves. Too often is this disease taken for something else, and pronounced malaria, dyspepsia, a cold, or some other thing. Let us discuss this early stage of this disease: Some authors still recognize the pre-tuberculous stage of the disease. This is erroneous, except, if we look upon this stage as a period preceding the onset of the disease in which there are yet no eruptions or tubercles. If, by this tubercular stage, is meant the tubercular diathesis, then we cannot classify it as such, as there are no changes in the health of the patient nor in the lung.

No, the pre-tuberculous stage of some authors is purely the early eruptive stage of tuberculosis. The earliest stage of tuberculosis means the eruptions of tubercles in the lungs. Compare the early lung invasion with the primary deposit of tubercles in the larynx. Long before any marked evidence of any tuberculosis involvement in the larynx exists, there is a pallid look or later a hyperemic state of the laryngeal structures, and that is caused by the primary deposit of tubercles. What we see in the larynx, we have in the lungs. These tubercles may remain in the lungs an indefinite time, or may break down, giving early signs of disintegration. They may undergo fibroid changes and become caseous and encapsulated, though this is a long process. It is during this process that any great physical strain, any infectious disease or improper mode of living, will intervene with this process of self-cure, and lead, by reason of local inflammation and nutritive disturbances, to the checking of this natural process of cure, and bring about softening of the caseous material in process of encapsulation. All lesions cannot be detected by physical auscultation. Very deep lesions are difficult of detection. It is in such cases of doubt that the clinical history of the patient and the tuberculin test play a great role.

More important than the family history, is the clinical and personal history of the patient. The mode of life of the patient must be closely looked into. Exposure to the disease by living in close proximity with relatives and friends should bear great weight. A gradual loss of weight is important, as well as the feeling of fatigue on least exertion. Failure of proper digestion, I consider of major

importance. Cough, mostly that of morning and that of a hacking type and a dry, continuous cough, if not caused from enlarged tonsils, or other like trouble, should be looked at with suspicion. The temperature is a great aid in the early diagnosis. Have a two-hour temperature chart taken, and note the rise of temperature after exercise and eating. The temperature varies from  $99^{\circ}$  to  $100^{\circ}$  F. The subnormal temperature is also of consequence. Constipation is a constant complaint of the tubercular. A rapid pulse is noticeable in primary tuberculosis, it is also feeble and not full, especially is it of consequence when occurring in anemic young women.

It is queer, but rarely do the tubercular consult us for the above lesions. Therefore, let us not take their diagnosis for granted, but let us take our stethoscope, pleximeter and hammer; let us have our patient take all his underclothing off, and let us find the infected area or areas, if any.

What are those signs which we should look for?

First, Inspection—Inspect for nothing more than the anatomical sufficiency of the thorax. Observe the abnormal, narrow or wide chest. Notice any immobility or retraction, if present. The physical habitus of the patient directs us to a tubercular state. Diminished expansion of the upper lobe means diminished inflation of the lungs, either from tubercular deposits or from cavitation.

Palpation—This goes also little towards detecting early lesions. The feeling of something vibrating in the lungs and in loud talking or sighing, is considered by some as an early diagnosis sign. I have experienced this latter sign when in the primary tubercular stage.

Percussion—This gives us very little in the early stage. There are not sufficient deposits of tubercles yet, and the connective tissue proliferation peripheral to the tubercles is not great enough, and the bronchioles are not sufficiently obstructed to cause any change in the percussion note. Only in some cases do we detect a tympanic quality of the percussion note, suggesting relaxation of the underlying tissue. Later, when the deposits of tubercles become sufficiently dense, we have dullness noticeable.

Auscultation—This gives important information by the appearance of signs indicative of hyperemia and delicate catarrhal changes in the alveoli and bronchioles. First and foremost, a diminution of the respiratory murmur, or a peculiar rough character of the

vesicular murmur, are important signs detected by auscultation. Fine crepitant rales or a stickiness of the respiration, are detected also by close observation, but, in the purely primary stage, we do not hear these rales or any stickiness. To detect this stickiness, which shows the increased moisture in the bronchioles and alveoli, we must have our patient take a few deep breaths and look for it at the end of inspiration.

I generally make my patients count "1, 2, 3," several times, and then take a sudden, deep inspiration; or I have them to cough and take a sudden inspiration. The same should be done for the detection of fine rales.

After a sufficient deposit of tubercles exists, the harsh respiration and cog-wheel respiration is noticeable. The points where we are most prone to find auscultation signs are at the apices (mostly left), along the anterior border of the clavicle, along the vertical border of the scapula. I have detected lesions in this latter spot long before any could be heard at apices.

The next sign that auscultation gives us is a jerky or intermittent respiration. This latter I consider an important physical sign, and have made it frequently in examinations in the early stages of tuberculosis.

Otto Haussen, Volland Tueban and others give us important literature regarding this jerky breathing. When found in the region of the heart it is called systolic intermittent breathing. The following are conclusions reached by Otto Haussen:

First. Interrupted breathing is chiefly noticeable in jerks, corresponding to the pulse rhythm.

Second. Interrupted breathing corresponding to the pulse rhythm is frequently a sign of hyperemia of that portion of the lung in which it is observed.

Third. Interrupted breathing corresponding to the pulse rhythm often indicates remains of former inflammatory processes of the lung or pleura, and permits the assumption of still existing inflammatory conditions of adjoining lung.

Fourth. Noticed at the upper lobes, it is a very significant sign. Turban says that it is often associated with fine rales.

The next sign detected upon auscultation is an interruption in the rhythm of the respiration. Tyndal, in an elaborate article on this subject, says: "Look for changes of rhythm in breathing and



do not wait for changes of pitch in the early diagnosis of tuberculosis. The normal rhythm in health consists of an audible inspiration, a pause and a short audible expiration, and is a continuous movement. Any interruption in this movement should be looked upon with suspicion. Again, we have the old cog-wheel and prolonged and audible respiration.

An abnormal transference of heart-sounds I consider also as an important addendum for an early sign. The presence of an existing pleurisy is a prime sign. Pleurisy, one author has said, is in the greater percentage of cases, tuberculosis.

So much for the most important signs to be detected in the early stages of this disease.

Now, notice that I have not spoken a word yet about the presence of the bacillus tuberculosis in the sputum. Here, let me say, that we too often fortify ourselves behind the microscope and make the latter the sum and substance of our knowledge in diagnosis. No doubt, the microscope is a valuable aid to us, but if we hope for better results in the treatment of tuberculosis, we must not wait for breaking down and cavitation, that we may find the sputum to examine for bacilli.

We must rely on our knowledge of pathology and our power of recognizing these pathological changes by physical signs which we find present. The absence of the tubercle bacillus in the sputum does not warrant the absence of tuberculosis. I have seen many cases where marked involvement of both lungs was present, and yet there were no bacilli in the sputum, after several consecutive examinations. This can easily be explained when we consider the pathology of the disease. So, then, let us not wait for bacilli to appear in the sputum, but let us come to a positive diagnosis before they make their appearance.

If the physical signs related above are not sufficiently convincing, and I do not see any reason why they should not be, let us use the X-ray (though this is not at reach of the general practitioner); or, better, let us use the tuberculin test. But, for myself, and the experience I have had with this test, I see no reason for not applying it in all suspected cases.

The trouble with the tuberculin test has been that too large doses were used and, unfortunately, it was applied in a too indiscriminate way. It should be used only when there are no physical

signs to direct us to a conclusive physical diagnosis. I know of a case where the test has been used where cavities were present. Such a case came to my knowledge some time since. Now, it was not the intention of Koch to have his tuberculin test used in such cases. Some will contend that it is a dangerous product. I, with the experience that I have had, have never met with any deleterious results. Used carefully and in a systematic way, it is a great addition to our armamentarium in diagnosing incipient or latent tuberculous lesions. That it may have brought up deleterious effects, I do not contend; but it is to know how it was administered in such cases.

When we hear of such men as Beckman, White, Klebs, Prof. Osler, Prof. Whittaker, Denison, Pottenger, Krause, Sandberg, Trudeau, Ambler, Dunn, Von Ruck and many others who use and advocate this means of diagnosis, it ought to be a guarantee for its administration. I have used it on myself, so that you cannot say I will not take my own medicine. A standard preparation should be used, either that of Koch, Trudeau or Von Ruck. The latter I use mostly. A 1% solution should be prepared in a 2-5 of 1% carbolic solution in distilled water. Of this I generally start with 1-10 of a cubic centimeter of this solution, which equals 1 milligram of tuberculin. Then, after a few days, and, if no reaction occurs, I inject 3 milligrams, or 3-10 of 1c. c. of solution. I wait again a few days and, if still no reaction occurs, I inject 5 milligrams, or  $\frac{1}{2}$  c. c. If, at this dose, the patient does not react, I wait a week and inject 10 milligrams or 1 c. c. of solution.

Some authors, as Maraglioni and Whittaker, still advocate large doses of 25 milligrams. I have not used such large doses, and do not think it safe to do so.

If any tuberculous foci are present, there will be reactive signs appearing. These are increased in the physical signs, permitting better detection. For instance, where there is interrupted breathing, there will be rales, etc.

Always should we make a plotted chart before administering the tuberculin test. Also, we should take a two hour temperature chart and have the patient follow his ordinary mode of living a few days before the test is applied. When and during the time of its administration the patient should be kept under close observation and quiet. Besides the local reaction there is a temperature

rise from 1 to 3 degrees Fahrenheit, also a feeling of languor, sometimes headache and nausea and pains in the joints and muscles; but never have I seen any serious symptoms result from the tuberculin test.

Concluding, let me say that another error that we often commit is not to be candid with our tubercular patients. For fear of frightening them, we give some other name to the disease, and let them go away with a false sense of security, allowing the disease to fasten its grip more securely upon them, and scattering the bacilli broadcast to infect others. Of course, it is a shock to a man to hear that he has tuberculosis; but is it not better that he should know this condition and suffer a shock, and take precautions against infecting himself and others, and following proper methods of treatment, than to drift along in ignorance of his disease without receiving proper attention?

It is not necessary that we should quarantine against tuberculosis, it is not necessary that the patient should feel that he is an outcast, but it is necessary, and demanded of us, as members of the medical profession, that we give our patients such instructions that the danger of infection will be reduced to a minimum. It is not a death warrant to tell a man that he has tuberculosis, but the neglect of telling him will make many warrants necessary. I have patients sent to me and have been amazed to find them in the last stages of the disease, with large abscess cavities, and not knowing their condition. Not only is it necessary to inform the patient in order to reduce the danger of infection, but also to gain co-operation in the treatment of the disease.

Now, gentlemen, I end this article with a plea as much for ourselves as for the tubercular: Let us at once provide measures to prevent the spread of tuberculosis in our city. Notification, inspection of houses, disinfection of same, registration of the tubercular, are the three primary points to start with. Let us use our influence to this end and try to educate the people in the right way.

It will take time to reach completion, but to do this there must be a start. Let us diagnose our cases early and use all means available to reach this latter end. This, I hope, you will help me to do. I have been a consumptive and it makes me shiver when I think that nine millions of the seventy or more millions of Americans

must be afflicted like I was. I was one of the fortunates and thank God for it. It depends upon you now to make others happy.

#### DISCUSSION.

DR. ELLIOTT, JR., considered that cases of pleurisy, non-traumatic, were all tubercular and reported two cases which he had seen five years ago with pleurisy and which were now dying of pulmonary tuberculosis. The French writers are of this opinion as well as Bowditch, of this country. Dr. Elliott, Jr., treated all cases of pleurisy as if they were tubercular. He considered that it was impossible to enforce laws regulating the spitting on sidewalks, etc., and thought that more could be accomplished by physicians instructing their cases. He thinks that the bacillus tuberculosis gains entrance into the human body through the gastro-intestinal tract more frequently than through the pulmonary tract.

DR. GESSNER had a case which he suspected of having tuberculosis and in which he had used tuberculin with a negative result. The patient had since got well, bearing out the diagnosis based upon the tuberculin test. He thought it wrong not to tell patients suffering with tuberculosis that they had the disease, as it was a hardship upon those coming in contact with such patients.

DR. STORCK believed that sixty to eighty per cent of tubercular patients were saved by early diagnosis. Whenever he finds harsh breathing and prolonged expiratory murmur, with temperature, he makes a diagnosis of pulmonary tuberculosis, and so informs the patient. (If the presence of tubercular bacilli in the sputum is waited for before making a diagnosis, the lung tissue will have broken down before rational treatment is resorted to.) The presence of the tubercular bacilli indicates that some breaking down of the lung tissue has already commenced, and, if possible, a diagnosis should be made before the presence of the bacilli can be demonstrated.

DR. J. F. OECHSNER believed that it was almost criminal not to inform patients of their true condition and related the case of a child, two years old, who had died of tubercular meningitis contracted from an uncle having pulmonary tuberculosis. He related another instance in which four or five members of one family were dying of pulmonary tuberculosis contracted from a member of the family who had recently died.



DR. LAZARD stated that there was another side to the question and that was the danger of specialists becoming over-zealous in finding pulmonary tuberculosis and related a case of a young man whom he had recently seen who was on the point of committing suicide, as he thought he had pulmonary tuberculosis, having been so informed by a physician. He had examined him carefully and had failed to find any positive evidence of the disease and the patient had since gained some 30 pounds in weight.

DR. VAN WART spoke of the hopefulness present in cases of tuberculosis. He had noted the presence of euphoria in these cases and was struck by the frequency with which it was met. Cyto-diagnosis in cases of meningitis was very important and upon this a proper diagnosis can often be made. In tuberculous meningitis the spinal fluid contains an excess of lymphocytes. He reported a case of tuberculous meningitis in which the diagnosis was made by the microscopical examination of the spinal fluid obtained by lumbar puncture. The spinal fluid in tubercular meningitis sometimes contains the tubercle bacillus, though the statistics of various writers differ.

DR. DEMPSEY wished to recommend the climate of Covington, La., as an ideal home for consumptives. He had sent a man there recently who had gained 30 pounds while there, but who later went to New Mexico and was brought back dead, and other cases have prolonged life by taking up a permanent residence at Covington.

DR. EUSTIS stated that undoubtedly the presence of tubercle bacilli in the fluids of tubercular meningitis and tubercular pleurisy, was rare, but that lately their presence had been brought out by a new technique. This consisted in first digesting the exudate in pepsin-hydrochloric acid and later centrifugalizing the digested exudate. By this method reports have recently shown that the presence of the tubercle bacilli can be demonstrated in these exudates.

DR. DUREL, in closing, stated that it *was* possible to enforce laws regarding expectoration in public thoroughfares and he thought that it was the duty of each member of the society to see that they are enforced. He had used the same methods in administering tuberculin as those of Dr. Von Ruck, but now he uses considerably smaller doses. A patient having cavities in his lungs was less liable to react to the tuberculin injection than one in the incipient stages of the disease. We should undoubtedly tell patients when they have tuber-

culosis. As regards Dr. Lazard's case, it was undoubtedly a case of tuberculosis cured spontaneously. He did not think that climate had any influence in curing tuberculosis and that a patient who lived outdoors, both day and night, would recover in New Orleans as well as anywhere else, if properly treated. He has not found the hopefulness in the early stages of the disease mentioned by Dr. Van Wart, and it was only in the latter stages of the disease that it manifests itself.

---

## Correspondence.

---

### European Notes.

By DR. I. I. LEMANN, of New Orleans.

Strassburg, January 1, 1905.

*To the Editors of the New Orleans Medical and Surgical Journal:*

The opening day of the New Year with its customary renewals of good resolutions reminds me most forcibly of my as yet unfilled promise to write you what might seem to be worthy of note or strikingly new, in medical matters, in this corner of the world. Not that my conscience has not already pricked me more than once, concerning that self-same promise! This letter now will, however, serve at the same time to carry to you and to my friends in the profession of the city and State my greetings of the holiday season and my best wishes for a happy New Year.

To one seeking to learn what is best in the methods of German medical education and to profit himself thereby Strassburg offers indubitable advantages. The Kaiser Wilhelm University here is one of the oldest in the empire and received fresh impetus and new life when upon the termination of the Franco-Prussian war and the taking over of Alsace-Lorraine by the Germans, the imperial government began to pour immense sums into the city for the development of the university and at the same time began to send here to fill the respective chairs the most capable and best equipped men available in all Germany. Already a large medical center, Strassburg by reason of this new impulse attained and has retained a high position among German universities. From

the standpoint of attendance it ranks among the most popular, leaving aside of course the universities in the great cities, as Berlin with its 13,000 students, Vienna with its 6,000, and Munich with its 4,000 (These figures include not only medical students, but students of all branches). Here we have a total of 1,300 students, which is on a par with, say Heidelberg, and gives an idea of the size of the average popular German university. Among these 1,300 Strasburg counts, about 200 medical students, and of these considerably more than half, indeed rather nearer two-thirds are first, second, and third year students and do not visit the clinics, that is to say, they are engaged in what we term the ground work of medicine: anatomy, physiology, etc., and do not go near a hospital or a patient. As you see, this makes the actual number of men frequenting the clinics comparatively small and consequently the advantage of personal and intimate demonstration correspondingly great. As to the amount of material, that is more than abundant. The Burger-Spital, curiously mediæval in its externals, has more than a thousand beds inclusive of the "clinics," that is the newer portions which have been erected for teaching purposes. For instance, the medical clinic contains about 200 beds, the surgical clinic as many more, etc. These clinics are modern buildings within the confines of the hospital grounds and are equipped and arranged with all that is newest and best for medical instruction. The medical clinic is only a little more than a year old and is said to be one of the best in Germany. Of course, these teaching parts of the hospital, the clinics, are absolutely under the control of the respective professors (the chiefs of departments), while those in the remaining portions of the hospital, the attending physicians, are appointed by the city.

So much for the material to be seen and for the opportunity to see well. As for the teachers, the Strassburg faculty includes such men as von Recklinghausen, in pathology; Hofmeister, in physiological chemistry; Schmiedeberg, in pharmacology, and Krehl, in medicine. The latter has but just come from Tubigen at the beginning of the present semester to succeed the venerable Naunum who has retired and has gone to Baden-Baden to live. Krehl is now a man of about forty- one or two and has already achieved a high name here in Germany. His work particularly upon the heart and disturbances of the circulation is fine. A new

edition of his book, "Pathological Physiology," has just appeared and is enjoying the popularity its predecessors had and deserved. Krehl's personality, quiet and unassuming as it is, is charming and the personal note of experience and warnings of difficulties to be encountered, which he manages to inject into his lectures, gives them a more vital and important meaning to his students. His method of teaching is practically entirely by means of clinics to the exclusion of didactic lectures as such and of ward instruction. It is only occasionally that he takes his class with him into the wards and there from bed to bed. Each morning at 8:30 his lecture begins and lasts until 9:45; usually from one to three patients are exhibited. As the patients are not disturbed, but are rolled into the amphitheatre in their beds, it is possible to bring in all sorts of cases. One student is always called to the side of the patient and some of the instruction is conducted in the Socrates method, but not exclusively so. If there is any special point to be demonstrated that cannot be observed from a distance (e. g., an examination) all the students are invited to come down and pass in single file by the bed. Of course, this is possible only by reason of the comparatively small number of hearers, say fifty. Occasionally, as I have said, the class is taken into the wards in order that something may be illustrated that cannot be well done in the clinic; usually it is into the typhoid division that we are taken. The lectures are simple and the students are made to appreciate the value of accurate and systematic examination and observation of the patient as well as to understand the relative worth of the symptoms in forming a judgment of the clinical picture. The cases presented are of sufficient variety to afford the student during a semester an excellent idea of the more usual diseases. An additional advantage to the post-graduate student to be secured in a medical school of this size is the privilege to "volunteer" in the clinic, that is to assist in the ward work and thus to secure a knowledge of the clinical and therapeutic method in vogue.

Recklinghausen, one of Virchow's early pupils and assistants, is now a man of seventy odd years, but nevertheless of remarkable activity and industry. When I write that he personally holds at least half of the autopsies; is as keen and accurate a microscopist as ever; and that he still can cut beautiful microscopic sections *freehand with a razor*, you will be able to appreciate the remarkable steadiness of his hand and the keenness of his vision. From his



students he exacts practice in cutting sections with a razor, free-hand, for he says the average one will have no microtome when later the student becomes the practitioner, and the use of pathological knowledge is not to be abandoned on leaving the laboratory. Similarly, he is insistent that students should make and study sections from fresh organs without any process of hardening, imbedding, or staining. In the course on pathological histology he is ably assisted by Schmidt, and their demonstrations are by no means perfunctory or superficial. The value of the course is added to by reason of the small number taking it. Recklinghauser will admit no one who has not studied medicine at least seven semesters. Equally instructive is his course on gross pathology (twice a week, two hours each time) in which he exhibits the organs from the autopsies of the half week, and while these are being passed around and examined by the twenty-five or thirty present, he is talking and demonstrating unceasingly. On Monday it is instructive and illuminating to go into the course where he is teaching his students how to hold autopsies and make protocols therefor. Four students are called down and two are assigned to the two heads and two to the bodies of the two subjects provided. Each must conduct his portion of the autopsy and dictate his findings as he meets them. It is, indeed, remarkable, the wonderful power of observation of this old man, the agility of his mind and of his body. He seems to see everything; now he corrects this man in a matter of technic; now he makes another see something completely overlooked. His autopsy methods are exact, and he insists upon the carrying out of his technic to the crossing of every *t* and the dotting of every *i*. If, in his insistence, he is often irascible and petulant, one readily forgives that when one has met him and become acquainted with his kindliness and earnest desire to help every one who shows a desire to learn. Of course, beside these regular courses for undergraduates, free opportunity is afforded for original work in the institute.

Of the other professors my knowledge is not so intimate, but all will appreciate the wonderful chances for good, original work under the direction of Hofmeister or Schmiedeberg. Their lectures, of course, are instructive and interesting by reason of their object lessons and demonstrations, as well as the richness of the suggestions and hints they throw out. The lectures of Schmiede-

berg, for instance, on pharmacology are illustrated as far as possible by experiments upon animals before the class.

As a place of residence, Strassburg, aside from the many cloudy, gray days one experiences here, is altogether to be commended. It is at the same time "*gemuthlich*," as the Germans say, and yet sufficiently metropolitan to afford ample opportunity for broadening one's knowledge of the liberal arts and for relaxation. As to the relative value of a sojourn here, compared to that in a larger center, I hope later to have an opportunity to judge.

ISAAC IVAN LEMANN, M. D.

---

ON SOME RELATIONS OF MEDICINE AND SURGERY TO JURISPRUDENCE.—C. Beck says that the medical profession is a noble one, but that its members are apt to neglect their duties as citizens as far as they are not of a hygienic character, and their indifference to legal points is one of the most conspicuous sins of omission in this direction. The law requires of the physician only that he should exercise reasonable skill and knowledge, but disappointed or litigious patients often demand much more than this, and involve the practitioner in legal contests. The various complications and sequelae occurring in the course of the treatment of fractures afford a fertile field for the dissatisfied, and the Roetgen ray has furnished a means of diagnosis and observation during the progress of these cases that cannot be disregarded, especially as it is beginning to find a place in the court room as well. The matter of giving professional testimony in accident cases is extremely important and requires good judgment to estimate the degree of disability, and to detect malingering. Complicated medicolegal questions also arise when chronic diseases like osteitis, arthritis deformans or malignant growths develop after an injury. Great difficulty in recognizing the etiological factor is found in the wide field of the so-called traumatic neuroses, and it is sometimes impossible to determine whether an injury was not simply an exciting cause for the manifestation of a disease which had existed before in a more or less latent stage. The most precise scientific knowledge alone is not sufficient, but must go hand in hand with common sense and self-control.—*Medical Record*, Feb. 11, 1905.

# N. O. Medical and Surgical Journal

---

## Editorial Department.

---

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

---

---

### Improper Medical Advertisements.

Just one year ago we announced the determination expressed by the Postoffice Department to wage a campaign against periodicals publishing immoral, indecent or extravagant medical advertisements. The department decided to exclude from the mails all newspapers or magazines, containing this quack or indecent matter.

At about the same time a few of the better class magazines and papers announced that they would exclude the objectionable advertisements. Since then others have followed suit, but it is not difficult at this writing to pick up in even our home daily newspapers any number of these illegal advertisements.

When a year ago we called attention to this subject we stated that we would endeavor to sustain the Postoffice Department and stimulate a continued effort in the proper direction. Again last October we advised making efforts to procure an enforcement of the law and suggested calling the attention of the postoffice authorities to some of the most flagrant violations of this law. As far as we know, although the Postoffice Department is still of the same mind, and some prosecutions have eventuated from their determination to enforce the law, no particular efforts have been made in this locality to have the Department intervene in any specific instance.

We now give notice to offenders, or possible offenders, of our purpose to call the attention of the Postoffice Department to some of the violations of the law. While this is to a certain extent a moral question it is at the same time a medical one, on account of the evils that are frequently brought about as the result of these advertisements, and we consider that it is our duty on both accounts to do what we can to aid the Government in at least diminishing, if not suppressing, the evil.

### **The Protection of the Medical Profession.**

No stronger evidence of the progress of the science of medicine is presented than in the floods of circulars, samples and testimonials which come in from all sorts of manufacturing concerns, good, bad and indifferent. Illegal practice of medicine is still flagrant in the face of the State laws and State boards supposed to correct these encroachments. Counter prescribing is even more common than when no law existed and the drugstore man, like the barber, volunteers to play the doctor whenever he believes he can cajole the customer. The newspapers earn a large income from staring and notorious advertising with grewsome stories of restored health—all playing upon the imagination and the purse of the hysterical subject.

The fetich doctors, including the fakirs in the Christian Science ranks, are allowed to bury victims of their hocus-pocus, usually without protest.

But all this should end; we were about to say “must” end, but it is a far cry from superstition to intelligence and the burden of superstition is laid very strongly upon our mixed people. The speculative instinct aids, too, in determining the experimenting with life itself.

Meantime the medical profession suffers. For, why are there great surgeons, if a dose of herbs, or a psychic sense will remove a cancer; or if a balsamic odor will restore an eye? Why grind the grist of learning, multiplying the students of the art of healing if a picture in the paper and a blatant claim of curing everything will put the sons of Esculapius to rout?

The medical profession are in many ways to blame for all these things, because the license was given early; but now it is time to call a halt.

The American Medical Association is once more trying to get its bill of incorporation through the National Congress. When it succeeds our national organization will be complete. Then we will have a position strong enough for us to demand remedy for the ills of our body politic; and even if it take a considerable time, we should strive to eliminate the patent medicine along with other fakir elements in the field.

There are quite a number of honest drug concerns in the United States striving for pure drugs; solely catering to the demand of



the legitimate profession and fulfilling a most excellent purpose. We are not striving against these; as a matter of fact we need their willing aid to further the cause of pure drugs and clean compounding.

With the advance of the profession into new fields of research, the way has been opened for all sorts of abuses and the time is ready for the most stringent protection, in the form of a righteous privilege to protect ourselves, mayhap there will eventuate a new era of healthfulness by the grace of intelligence and sane reason, replacing the role of superstition and clumsy charlatanism.

---

### **National Provision for Leprosy.**

A bill was presented to the Senate of the United States on Feb. 3, 1905, providing for a leprosarium for the segregation of lepers and to prevent the spread of leprosy in the United States.

This bill recommends the appropriation of \$250,000 for the establishment of such a place on some site of an abandoned military, naval, or other reservations, suited for the purpose, and intends that the direction of such shall be in the hands of the United States Public Health and Marine Hospital Service. Lepers are to be received from any State or Territory of the United States within its Continental boundaries, either coming voluntarily or under consignment from the State or Territory.

It is to be hoped that the bill will pass, for, since 1897, frequent attention has been called to the need of such an institution in this country. After the Berlin Leprosy Conference in that year, all governments were urged to take some action, and while almost every European government has made provisions, many with less reason, the United States has been entirely apathetic.

The Louisiana Leper Home has shown what may be done with limited means! A government institution with departmental discipline and authority will do more.

The bill is not yet a law and it may go the way of the two others which have rested peacefully in the pigeon holes for some three to five years. So our own Board of Control of the Leper Home of Louisiana may go on with their good work, resting content with the thought that by the time the United States government is ready, we shall have established some measures they may be willing to learn.

## Abstracts, Extracts and Miscellany.

---

### Department of Obstetrics and Gynecology.

---

In charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER, New Orleans

---

TREATMENT OF CARCINOMA CERVICIS UTERI IN ADVANCED STAGES—Bovée (*American Medicine*, Jan. 7) says that it is necessary to consider the age of the patient, the family history, the apparent duration of the disease, the variety of the disease, the amount of excavation already resulting from the disease, the amount of infiltration of adjacent tissue, the involvement of other distant parts, and the presence of other physical disabilities that preclude radical surgical operations. He finds that the disease makes more progress in young women than in those far advanced in years, and usually causes death in 18 months, if left alone. The woman of from 60 to 90 usually will live longer than the woman of 28. A family history of cancer has a deterring influence regarding radical surgery. Severe surgical operations involving appreciable mortality rates or a marked degree of additional suffering should not be employed in the treatment of carcinoma of the cervix except in very early cases. According to the reports of exhausting microscopical examinations of the tissues surrounding the uterus in cancer of the cervix, we have no means of knowing before operation that eradication is certain in any given case of the disease; hence such attempts must be reserved for the very early and most promising ones. Bovée believes that the galvano-cautery and the curette combined furnish the very best local treatment, so far as influencing the progress of the disease is concerned. The curette should be used carefully but thoroughly, the flow of blood being controlled by either gauze, or clamp compression. The galvano-cautery is then carefully employed to destroy practically all tissue between the cul de sac of Douglas and the bladder and laterally between the ureters.

Great care should be exercised that the bladder, uterus, peritoneum and rectum be not penetrated nor injured by over heating.

Vaginal douches of from 5 to 2 per cent solution of potassium permanganate he has found the most satisfactory to control a malodorous discharge following the use of the cautery. When the cervix is much infiltrated, the canal obstructed, and the discharges, becoming foul, are confined in the uterus, evacuation and provision for future drainage is the proper treatment.

ULTIMATE RESULTS OF ANTERIOR UTERO-VAGINAL INCISIONS—The *Jour. of A. M. A.*, contains an extract of Bardeleben's paper in which is given the reports of 8 cases examined for the remote results of rapid dilatation by means of incision through the portio and vagina. There was no hemorrhage, no discharge in any instance, no retroflexion, and in only one was ante-position and in two retroversion with anteflexion noted.

The advantage of the incision is that one can control the evacuation of the uterus in a given time, and the wound is in the best possible condition for repair.

Instrumental dilatation is under less complete control and in unyielding tissues there is danger of laceration, after which the prospects for repair are much less favorable.

ADMINISTRATION OF ANTISTREPTOCOCCIC SERUM—Walker (*Lancet*, London, Dec. 31.) states that this injection of antistreptococcic serum in cases of pure streptococcal infection has been followed by strikingly beneficial effects. The variability in the results of the serum unquestionably has been due to the selective activity displayed by the antitoxin of each variety of streptococcus, or to the serum being used too late, or having lost its activity from staleness.

More uniform results are likely to be obtained from the present compound antistreptococcic serum than from the earlier forms, from the prompt injection of serum at the commencement instead of near the close of a severe infection, and from the use only of serum which has been recently prepared. The administration of the serum for some days after the general symptoms have disappeared in order to avoid recrudescence. The question of dosage must be judged by the nature of each case and the effect obtained by the injection, but it is important to know that large doses spread over several days have been used without ill-effect. The most rational method would seem to be that of a large injection, (from 20 to 25 c.c.) on the first occasion, followed by smaller doses as the case may require.

## Department of Nervous and Mental Diseases.

In charge of DR. P. E. ARCHINARD and DR. ROY M. VAN WART,  
New Orleans.

THE ACHILLES TENDON REFLEX IN TABES DORSALIS—(*Neurologisches Centralblatt* No. 1, 1905.) In an article on the relationship of the tendon reflexes to the sensory changes in tabes dorsalis, Bregman gives an interesting summary of the diagnostic importance of this reflex. After mentioning the various writers who have reported cases of tabes where the knee-jerks were still present or increased and the Achilles tendon reflexes absent he gives the statistics of Kollarits and of Sarbo.

Kollarits examined 100 cases and found the Achilles tendon reflex absent in 65 cases, present on one side only in five cases. The patellar reflex was absent in 56 cases, present in 40 and absent on one side only in four cases.

Sarbo in his recent monograph reports that in 92 cases the patellar reflex showed departure from the normal in 87 per cent of cases and the Achilles tendon reflex in 91 per cent. He concludes that it is very important aid in cases where the diagnosis is difficult.

Católa in the same number from a study of 38 cases of tabes concludes that the abdominal reflex has little direct relation to the disease or to the age of the patient.

Viték, in another article in the same journal, reports a case of tabes dorsalis in which a decubitus appeared on the penis from the constant dribbling of the urine over a certain area into a urinal.

MULTIPLE SCLEROSIS—Morawitz (*Deutsch. Archiv. f. klin. Med.* Bd. 82 Hft. 1 u. 3) reports 33 cases observed in the last two and a half years in the clinic of Krehl of Tübingen and compares his series with that of given by Müller in his recent monograph (Jena, 1904.)

He agrees with Müller in considering the Babinski sign valuable evidence of the presence of organic disease in doubtful cases. He states that it is not present in hysteria and its presence or absence should be ascertained in doubtful cases. This agrees with the observations of the writer in the clinics in New Orleans, though the Babinski sign is not in many cases an early symptom. It is



interesting to note that Pfeifer (*Monatsschr. f. Psychiat. u. Neurol. Bd. 16 Hft. 6. 1904*) watched the appearance of this sign in several cases. We might therefore conclude that its presence in a given case is a valuable positive sign but that its absence in the presence of other signs means little.

---

## Department of Therapeutics.

---

In Charge of DR. J. A. STORCK, New Orleans.

---

THE VALUE OF TUBERCULIN.—“On several occasions during the past three years we have printed in the editorial columns of the *Therapeutic Gazette* our views in regard to this important matter, and have at other times printed in our original pages articles which have invariably strongly supported the employment of tuberculin as a diagnostic and therapeutic agent. Our own editorials have been guarded, and in one sense antagonistic to its use on the part of the general practitioner. There can be no doubt that in the great majority of cases of tuberculosis it is possible by careful watching and careful physical examination to reach a positive diagnosis that a patient has or has not this type of affection without relying upon the injection of tuberculin. Most of those who have used this substance to a sufficient degree to be considered experts in its employment admit that it is an agent of very great power, that it must be used with caution, and that there are fallacies connected with its use. In other words, no physician has a right because a patient reacts after using tuberculin, to state positively that he has tuberculosis, nor is he correct in stating positively upon this basis alone, when no reaction occurs, that the patient is absolutely free from tubercular disease.

“Among those who have advocated within certain lines the employment of tuberculin, both as a diagnostic and therapeutic agent, there is no one who receives and deserves the confidence of the profession more than Dr. E. L. Trudeau, of Saranac Lake, who has not only based his views upon a large clinical experience, but has had them endorsed by his experimental researches.

“In the *Journal of Medical Research* for August, 1904, Dr. Trudeau writes a paper, with the assistance of Dr. Baldwin and Dr. Kingborn upon the subject of ‘Tuberculin Reaction.’ These

gentlemen have investigated several important points concerning the influence of this substance. First, the effect of tuberculin in spreading the disease. Using rabbits for their investigation, they found that when local tuberculosis in the eye is produced by inoculation, the administration of tuberculin failed to result in any spread of the malady, but on the contrary, seemed to exercise a favorable and absorptive influence upon the diseased focus. The number and methods of their experiments scarcely seem to justify our reaching a positive opinion that the use of tuberculin never spreads the disease, but the results are indicative. We wish that there had been more experiments designed to study the influence of tuberculin upon tuberculosis involving other organs from which it could be more readily disseminated, as some persons have claimed that one of the disadvantages of tuberculin was the danger of its spreading the disease; this line of research is not only most interesting, but of great clinical value.

"The second point which they endeavored to determine was the effect of the removal of a tuberculosis focus upon the tuberculin reaction. They found that the extirpation of such a focus was followed by loss of reaction, but their experiments were not sufficiently numerous to make this certain. In regard to the question, 'Is the reaction always dependent upon the presence of specific tubercles?' they reach an affirmative conclusion.

"A very interesting point which they have also investigated deals with the question, 'How long after infection with tubercle bacilli does susceptibility to reaction begin?' As a result they believe that a period of ten to fifteen days is required, since the mere presence of tubercle bacilli in the body prior to the formation of actual tubercle does not give the reaction.

"The fact that the experiments have been carried out upon animals whose natural temperature variations are considerable, and that in some instances the tests were not very numerous, necessitates hesitation in the absolute acceptance of the conclusions reached, but the care with which Dr. Trudeau carries out all his investigations, and his thorough acquaintance with the subject, provides us at the present time with the best information that we have in regard to these very important questions. We hope that time and opportunity will permit a further continuance of this most suggestive line of research."

## Louisiana State Medical Society Notes.

In charge of DR. P. L. THIBAUT, Secretary, 141 Elk Place.

**OFFICERS**—President, Dr. Charles Chassaing, New Orleans; 1st Vice President, Dr. Oscar Dowling, Shreveport; 2nd Vice President, Dr. L. C. Tarleton, Marksville; 3rd Vice President, Dr. J. F. Buquoi, Colomb; Secretary, Dr. P. L. Thibaut, New Orleans; Treasurer, Dr. M. H. McGuire, New Orleans.

**COUNCILLORS**—Drs. A. G. Friedrichs, Chairman, 2nd Cong. Dist., 641 St. Charles St., New Orleans; J. J. Ayo, Sec'y., 3rd Cong. Dist., Bowie; P. E. Archinard, 1st Cong. Dist., New Orleans; S. L. Williams, 5th Cong. Dist., Oak Ridge; N. K. Vance, 4th Cong. Dist., Shreveport; C. M. Sitman, 6th Cong. Dist., Greensburg; C. A. Gardiner, 7th Cong. Dist., Sunset.

**SUBJECTS OF SECTIONS FOR COMING MEETING.**—The Committee on Scientific Work wishes to thank the Chairmen of Sections for their promptness in selecting the various subjects of discussion for the coming annual meeting (May 9, 10, 11). We have now heard from all but three and we hope that these gentlemen will very shortly furnish us with the desired information.

The following is a list of the subjects already selected:

**GENERAL MEDICINE**—Chairman, Dr. L. G. LeBeuf, New Orleans.

Subject: "*Pneumonia*."

To open discussion, Drs. Charles Galloway of Timon and Nash Collins of Delhi.

**SURGERY**—Chairman, Dr. C. J. Gremillion, Alexandria.

Subject: "*Fractures of the Lower Extremity of the Radius*."

To open discussion, Drs. E. D. Martin of New Orleans and E. D. Newell of St. Joseph.

**NEUROLOGY**—Chairman, Dr. L. L. Cazenavette of New Orleans.

Subject: "*Peripheral Neuritis*."

To open discussion, Drs. R. M. Van Wart of New Orleans and E. M. Hummel of Jackson.

**MATERIA MEDICA AND THERAPEUTICS**—Chairman, Dr. P. A. Boykin, of Jeanerette.

Subject: "*Hemostatics, Local and Internal*."

To open discussion, Drs. R. McG. Carruth of New Roads and W. L. Egan of Shreveport.

**DISEASES OF CHILDREN**—Chairman, Dr. E. D. Fenner of New Orleans.

Subject: "*Pneumonia in Children.*"

To open discussion, Drs. T. S. Kennedy of New Orleans and P. J. Dansereau of Labadieville.

OTOLOGY.—Chairman, Dr. J. R. Fridge, Baton Rouge.

Subject: "*Suppurative Otitis Media.*"

To open discusson, Drs. W. Scheppegrell of New Orleans and E. O. Powers of Grangeville.

OBSTETRICS AND GYNECOLOGY.—Chairman, Dr. L. Perrilliat, New Orleans.

Subject: "*The Bladder in Gynecology.*"

To open discussion, Drs. E. L. Irwin of Clinton and A. W. Jones of Monroe.

GENITO-URINARY DISEASES.—Chairman, Dr. C. M. Menville, of Houma.

Subject: "*Simple Urethritis Complicated with Lithoma and Urethromania.*"

To open discussion, Drs. P. J. Gelpi of New Orleans and G. J. Sabatier of New Iberia.

DERMATOLOGY.—Chairman, Dr. Isadore Dyer, New Orleans.

Subject: "*The Bites of Insects.*"

To open discussion, Drs. Ralph Hopkins of New Orleans and S. H. Scruggs of Cloutierville.

BACTERIOLOGY.—Chairman, Dr. John J. Archinard of New Orleans.

Subject: "*Toxins and Vaccins as Aids to Diagnosis and Treatment.*"

To open discussion, Drs. N. K. Vance of Shreveport and O. L. Pothier of New Orleans.

ORAL SURGERY.—Chairman, Dr. A. G. Friedrichs, New Orleans.

Subject: "*Treatment of Fractures of the Inferior Maxilla.*"

To open discussion, Dr. B. A. Colomb of Union.

SANITARY SCIENCE AND QUARANTINE.—Chairman, Dr. Quitman Kohnke of New Orleans.

Subject: "*Preventive Medicine.*"

To open discussion, Drs. W. G. Owens of Whitecastle and J. S. Stephens of Natchitoches.

DR. QUITMAN KOHNKE, Chairman of the Section on Sanitary Science and Quarantine, begs to call attention to the following letter:



To the members of the Louisiana State Medical Society.  
Dear Doctor:

Preventive medicine should receive more attention than it does and that it has in the past.

The section on "Sanitary Science and Quarantine" is growing in importance with every year of the Society's existence. Will you not help with your contribution to make the coming meeting of the Society a record one for preventive medicine?

The proper and legitimate influence of our Society on public questions can best be advanced by showing our interest in the protection of the public from preventable diseases; and that the Society's influence on State legislation affecting the public health and the medical profession should be greater than it is no member questions.

Respectfully,

QUITMAN KOHNKE,

Chairman Committee on Sanitary Science and Quarantine.

THE FOLLOWING PARISH MEDICAL SOCIETIES ELECTED OFFICERS at their annual meetings:

ASCENSION PARISH MEDICAL SOCIETY.—President, Dr. Wm. M. McGalliard, Donaldsonville; Vice President, Dr. J. H. Hanson, Donaldsonville; Secretary-Treasurer, Dr. Paul T. Thibodaux, Donaldsonville. Next annual meeting, January 12, 1906.

AVOYELLES PARISH MEDICAL SOCIETY.—President, Dr. C. J. Ducoté, Cottonport; Vice President, Dr. W. T. Couvillon, Marksville; Secretary, Dr. E. S. Matthews, Bunkie; Treasurer, Dr. Emil Regard, Mansura. Next annual meeting, first Thursday in January, 1906.

BI-PARISH MEDICAL SOCIETY.—(Red River and Natchitoches.) President, Dr. C. E. Edgerton, Coushatta; Vice President, Dr. S. L. Scruggs, Cloutierville; Secretary, Dr. J. A. Hendrick, Eastpoint; Treasurer, Dr. J. R. McGoldrick, Coushatta. Next annual meeting, first Monday in April, 1905.

BOSSIER PARISH MEDICAL SOCIETY.—President, Dr. John L. Scales, Atkins; Vice President, Dr. David J. McAnn, Atkins; Secretary, Dr. J. L. Page, Des Arc. Next annual meeting, second Tuesday in January, 1906.

EAST BATON ROUGE PARISH MEDICAL SOCIETY.—President, Dr. T. P. Singletary, Baton Rouge; Vice President, Dr. T. C. Foreman, Foreman; Secretary-Treasurer, Dr. J. A. Caruthers, Baton Rouge. Next annual meeting, January, 1906.

CALCASIEU PARISH MEDICAL SOCIETY could not hold its annual meeting at the specified time and the same officers hold over until their successors are elected. Following are the officers: President, Dr. A. J. Perkins, Lake Charles; Vice President, Dr. C. L. Richardson, Lake Charles; Secretary-Treasurer, Dr. T. H. Watkins, Lake Charles.

CLAIBORNE PARISH MEDICAL SOCIETY held its annual meeting January 17 and elected the following officers: President, Dr. H. W. Jarrell, of Aycock; Vice President, Dr. L. T. Walter, of Haynesville; Secretary-Treasurer, Dr. J. E. Knighton, of Homer. Drs. J. C. Allgord, of Summerfield and H. C. Walter and W. H. Bancum, of Haynesville, were elected to active membership. Interesting papers were read, Dr. P. Gibson, of Homer, taking "Swamp Fever" as his subject and Dr. Cooksey, of Homer, "Scarlatina," and Dr. Jarrell "Broncho-Pneumonia." These papers showed careful preparation on the part of the authors and were freely and exhaustively discussed by the members. There are only three eligible physicians in the parish who are not members of the Society. Dr. J. C. Calhoun, the last worthy president of this Society, has resigned to join his son, Dr. J. D. Calhoun, who is practicing in Mansfield, DeSoto Parish. The Society is prosperous, a perfect *entente cordiale* existing between its members, and Secretary Knighton hopes to enroll every physician in the parish before the next meeting, which will take place on the second Tuesday in April.

FELICIANA MEDICAL SOCIETY—President, Dr. Wm. Burkhalter, Laurel Hill; Vice President, Dr. James Kilbourne, St. Francisville; Secretary-Treasurer, Dr. James McKowen, Jackson. After election of officers, there followed a discussion on "Abnormalities," and on "Rheumatism, from a Practical and Scientific Standpoint," which was participated in by all the members present in an interesting and instructive manner. The next regular meeting of this Society will be held at Clinton, on the second Tuesday in April. The next annual meeting will be held in January, 1906.

FRANKLIN PARISH MEDICAL SOCIETY.—At annual meeting held January 10, 1905, following officers were elected: President, Dr. L. M. Griffin, Oakley; Vice-President, Dr. C. L. Ramage, Winnsboro; Secretary, Dr. C. L. Guice, Winnsboro. The following standing committees were named by the chair: On Scientific Work, Drs. W. W. Lee, H. B. Womble, C. L. Guice; on Public

Health and Legislation, Drs. C. L. Ramage, J. A. McNair, M. O'Brien; on Social Entertainments, Drs. H. B. Womble, J. L. Denson, R. L. May.

OUACHITA PARISH MEDICAL SOCIETY.—President, Dr. W. B. Miller, Fouche; Vice-President, Dr. W. E. Pugh, Monroe; Secretary, Dr. R. W. O'Donnell, Monroe. Next annual meeting October 13, 1905.

RICHLAND PARISH MEDICAL SOCIETY.—President, Dr. H. B. Wren, Rayville; Vice-President, Dr. D. R. Sartor, Alto; Secretary-Treasurer, Dr. S. L. White, Rayville. Next annual meeting first Wednesday in April, 1905.

SABINE PARISH MEDICAL SOCIETY.—President, Dr. G. M. Mott, Converse; Vice-President, Dr. J. M. Middleton, Many; Secretary-Treasurer, Dr. D. H. Dillon, Fisher. Next annual meeting first Wednesday in April, 1905.

SHREVEPORT MEDICAL SOCIETY.—President, Dr. F. J. Frater, Shreveport; Vice-President, Dr. C. C. Sims, Dixie; Secretary-Treasurer, Dr. T. D. Boaz, Shreveport. Next annual meeting December 5, 1905.

ST. TAMMANY PARISH MEDICAL SOCIETY was to have held its annual meeting on January 11, 1905, but rain prevented the assembly. Dr. J. F. Pigott, Secretary, informs us that he has sent a call for a meeting on January 25.

TENSAS PARISH MEDICAL SOCIETY will hold its annual meeting first Wednesday in April, 1905.

VERNON PARISH MEDICAL SOCIETY.—President, Dr. M. R. McAlpin, Leesville; Vice-President, Dr. C. C. Self, Hornbeck; Secretary-Treasurer, Dr. F. W. Dortch, De Ridder. Next annual meeting first Tuesday in December, 1905.

WEST BATON ROUGE PARISH MEDICAL SOCIETY.—President, Dr. F. H. Carruth, Lobdell; Vice-President, Dr. J. O. St. Dizier, Walls; Secretary-Treasurer, Dr. H. Guy Riché, Devall. Next annual meeting October, 1905.

WINN PARISH MEDICAL SOCIETY will hold its annual election on the first Tuesday in April, 1905. Owing to the serious illness of President I. E. Siess, the annual election could not be held this quarter. Following are the present officers: President, Dr. I. E. Siess, Winnfield; Vice-President, Dr. H. A. Smith, Dodson; Secretary-Treasurer, Dr. A. M. Peters, Winnfield.

SPECIAL NOTICE TO PARISH SECRETARIES.—Secretaries of Parish Societies who have not answered the many requests of the Secretary of the State Society for list of officers and members, are earnestly requested to furnish same at once, as it is impossible to keep the list of members up-to-date unless this important information is sent. Get busy, gentlemen. It will take only a few moments of your time to help keep the machinery going smoothly and uninterruptedly.

PARISH SOCIETY CHARTERED—RAPIDES PARISH MEDICAL SOCIETY.—Chartered January 14, 1905. Charter members 22. President, Dr. E. F. Luckett, Loyds; First Vice-President, Dr. G. M. G. Stafford, Alexandria; Second Vice-President, Dr. J. A. White, Alexandria; Secretary, Dr. C. J. Gremillion, Alexandria; Treasurer, Dr. A. H. Biscoe, Tiogo. Other members are: Drs. B. A. Bailey, Poland; W. W. Ashton, Alexandria; A. R. Choppin, Lamothe; J. D. Everett, Lecompte; C. M. Harris, Welchton; E. L. Henry, Lecompte; Clarence Pierson, Alexandria; C. G. Salles, Alexandria; R. C. Kemp, Echo; A. Leigh, Lecompte; R. L. Randolph, Alexandria; B. N. Sewall, Bryce; R. O. Simmons, J. L. Wilson and F. N. Bryan, Alexandria; L. E. Litton, Cheneyville.

---

## Orleans Parish Medical Society Notes.

---

In charge of Publication Committee, DR. ALLAN EUSTIS, Ex-Officio  
Chairman, DR. JULES LAZARD and DR. HOMER DUPUY.

---

During the past month the evidence of increased interest in the society was shown by the election of ten new active members.

In order to remind the members of the date of meetings and thereby increase the attendance, a second notice, with the program of the meeting, will be sent to each member the day of the meeting. It is hoped by this to increase the discussion of papers, as we know how easy it is for a busy practitioner to forget the dates of meetings.

For the same reason it has been decided to appoint a particular member to open the discussion of each paper.



The promptness with which the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL has issued the Annual Proceedings for 1904, and the hearty co-operation of the editors of this Journal with the Publication Committee, has prompted the society to have the proceedings for 1905 published by this Journal.

It is earnestly requested that members changing their addresses will promptly notify the secretary, so that there will be no occasion for their not receiving due notice of meetings.

---

## Medical News Items.

---

A COURSE OF INSTRUCTION IN PUBLIC HEALTH IS BEING OFFERED by the University of Pennsylvania, beginning October 1, 1905. The course will include sanitary engineering and legislation, inspection of meat, etc.; social and vital statistics; general and personal hygiene. This course will fulfill a decided want and should deserve a large patronage at the hands of men interested in the subject.

THE AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION ELECTED the following officers at their St. Louis meeting, in September: Emil Heuel, M. D., President, New York; Charles Hamilton Hughes, M. D., First Vice-President, St. Louis; Morris Weill Brinkmann, A. B., M. D., Second Vice-President, New York; Richard Joseph Nunn, M. D., Treasurer, Savannah, Ga.; Clarence Edward Skinner, M. D., LL.D., Secretary, 67 Grove street, New Haven. The next annual meeting will be held at the New York Academy of Medicine, September 19, 20 and 21, 1905.

THE AMERICAN ANTI-TUBERCULOSIS LEAGUE WILL MEET AT THE GEORGIA STATE CAPITOL, in Atlanta, in April (17th to 19th), 1905. Reduced rates have been arranged for railroads and hotels, and already over one thousand delegates have been enrolled. A local committee of about fifty members of the medical profession will look after visitors. Dr. George Brown, of Atlanta, is president and executive officer.

THE MANUFACTURERS OF OTHER "ZONES" are much exercised over a preparation called "liquozone," which has been largely advertised and sold, especially in the Northwest, being claimed to be a "sure cure" for all troubles caused by germs. Various analyses published in Bulletin No. 63, of Government Agricultural Experimental Station, in North Dakota, show that its principal constituents are sulphuric acid and sulphurous acid. Both its active ingredients and all the extravagant claims for it remind us of a preparation which was sold here for some time under the name of "Microbe Killer." The latter has, of course, petered out, and we believe our manufacturing friends need have no fears as to either the length of life or the possibility of harm to them in the new candidate for the favors of the gullible public.

THE IOWA MEDICAL JOURNAL IS TO BE CONGRATULATED on its January number which contains a complete directory of all the Iowa physicians and other matters connected with it.

THE BOARDS OF HEALTH OF LOUISIANA, TEXAS AND ALABAMA, AND THE U. S. PUBLIC HEALTH AND MARINE HOSPITAL SERVICE will hold a joint session in Mobile, Ala., in March.

A COMPLIMENTARY DINNER WAS GIVEN TO DR. GEORGE J. FRIEDRICHS, February 21, by the dentists of this city in honor of his 50th anniversary as a dentist.

PERSONALS: Dr. E. H. Payne has moved from Winnfield to Athens, La., where he will practice.

Dr. E. O. Trahan has returned to New Orleans after spending some years at Whitecastle, La.

Dr. W. E. Van Zant has moved from Mandeville, La., to Santa Marta, in the District of Columbia, where he will reside.

Dr. L. A. Ducros has been appointed Coroner for the Parish of St. Bernard.

Dr. H. R. Slack of LaGrange, Ga., was in the city recently and paid the Journal a pleasant visit.

DEATHS: Dr. Walter Wilkinson at Montgomery, Ala., on Feb. 9. The doctor was a graduate of Tulane University.

Dr. A. K. Tarkington at Hot Springs on February 4. The doctor formerly practiced in Shreveport.

Col. Thomas F. Goode, proprietor of the Buffalo Lithia Springs, and a noted lawyer and a Confederate officer, died recently, aged 90 years.

MARRIED: Dr. M. H. McGuire and Miss Josephine May Wooten, on February 1, in New Orleans.

Dr. P. M. Lightfoot to Miss Mamie Ross Pinkston, at Shorter, Ala., on January 26.

Dr. J. A. Young, of Campti, La., to Miss Irma Jones.

---

## Book Reviews and Notices.

---

*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

---

*Physiological Economy in Nutrition with Special Reference to the Minimal Proteid Requirement of the Healthy Man; An Experimental Study* by RUSSELL H. CHITTENDEN, PH.D., LL.D., SC.D. Frederick Stokes Co., New York, 1904.

The author of *Digestive Proteolysis* has given us another contribution to the subject of nutrition, a matter of inquiry not sufficiently considered by our profession. In this work on *Physiological Economy in Nutrition* Professor Chittenden has had associated with him a most excellent corps of assistants, including the painstaking Mendel.

This work marks an era in nutritional experiments, and, together with similar work of the United States Department of Agriculture, it reflects credit upon American experimenters in this field of research.

To the critical student of nutrition, this book will prove an invaluable record of facts scientifically proven. Professor Chittenden has demonstrated the fact that Voit's standard of 118 grams of proteid or albuminous food is much too high. His experiments were conducted upon three distinct classes of individuals:

First—A group of five men, of varying ages, connected with the University as professors and instructors. They were selected as representative of the mental, rather than the physical, worker.

Second—A detail of thirteen men, volunteers from the hospital corps of the United States Army, and representative of the moderate worker.

Third—A group of eight young men, students in the University, all thoroughly trained athletes.

With regard to the Voit standard, we quote the following from Professor Chittenden's work: "It will be remembered that the Voit standard calls for 118 grams of proteid or albuminous food daily, of which 105 grams should be absorbable, in order to maintain the body in a condition of nitrogen equilibrium, and in a state of physical vigor and general tone. This would mean a daily excretion through the urine of at least 16 grams of nitrogen. The daily output in the case under discussion, however (*i. e.*, the case of Professor Chittenden himself), was 5.699 grams for a period of nearly nine months. This amount of nitrogen excreted through the urine means only 35.6 grams of proteid metabolized, or about one-third the amount called for by the Voit standard, or the standards generally adopted as expressing man's daily requirement of proteid food." While the case cited above is typical, the results of the experiments upon the several groups varied within certain limits. However, it was proved of the three classes that they not only maintained their health and strength, but that they also increased in muscular power.

If these experiments prove anything, it is that man takes, at least, twice as much proteid food as is necessary to maintain nitrogenous equilibrium.

It is one of the axioms of physiology that the majority of the diseases of mankind are due to perversion of nutrition, or are connected with it. Then, why should man load up his system every day with two or three times the amount of food required? STORCK.

---

*The Art of Compounding—A Text Book for Students and a Reference Book for Pharmacists at the Prescription Counter. Third Edition.* By WILBUR L. SCOVILLE, PH.G. P. Blakiston's Son & Co., Philadelphia, 1904.

While this book is written primarily for pharmacists and pharmacy students, physicians and medical students will find in its pages many things which they should know. Every physician should acquaint himself with the physical, as well as the chemical, properties of the materials which he uses in his prescriptions. In this event, a presentable mixture can then be compounded instead of a sloppy one.

To those practitioners compelled to compound their own prescriptions—a class which must increase, due to the habit of substitution and counter-prescribing practiced by some pharmacists—this book offers many valuable hints. The intelligent physician will be repaid and his patients benefited by following the teachings of this treatise. STORCK.

---

*Handbook of Physiology.* By W. D. HALLIBURTON, M. D. F. R. S. *Nineteenth Edition.* P. Blakiston's Son & Co., Philadelphia, 1904.

In its earlier editions, this work was known as *Kirk's Handbook of Physiology*.

The object of the work is to supply students with a complete but elementary text book, and we feel that the author has succeeded well in his purpose. His descriptions are succinct and clear. The subject of hemodynamics has been revised by Professor T. George Brodie. The nervous system, as its importance dictates, has received ample attention in a work of this kind.

The volume has also been enriched by several instructive new diagrams from Professor Shafer's *Essentials of Histology*. The illustrations are numerous. STORCK.



*A Treatise on Bright's Disease and Diabetes.* By JAMES TYSON, M. D.  
P. Blakiston's Son & Co., Philadelphia. 1904.

This excellent work had been out of print many years when the present (second) edition was issued. Always a scientific and practical treatise, it has now been rewritten and brought up to date, the writer having drawn upon his extended and extensive experience for that purpose. New sections on acute interstitial nephritis and on the dietetic treatment of Bright's disease have been added, both valuable; also, sections on the ocular manifestations of the diseases under consideration have been contributed by Dr. Geo. de Schweinitz.

It is regrettable that a few errors derogate from the accuracy of a book otherwise so good. For instance, on page 341, antipyrin, *antifebrin*, etc., are spoken of, without distinction, as being given in doses of fifteen grains three times a day; again, on page 360, in a table, 40 is printed instead of 4, which is puzzling. These points are mentioned, not in order to be hypercritical, but because it is a pity that they were not avoided, especially in a second edition. They do not diminish the true value of the work.

C. C.

---

*Enlargement of the Prostate.* By C. MANSELL MOULLIN, M. D., F. R.  
C. S. P. Blakiston's Son & Co., Philadelphia. 1904.

This volume of about two hundred pages is divided into eleven chapters, treating, respectively, of the normal structure and function of the prostate; of the histology, characters, and varieties of the enlarged gland; of the cause, the effects, the symptoms, the diagnosis, the general treatment, the local treatment, and the radical treatment of prostate enlargement; finally, of the effect of orchidectomy and operations upon the structures of the spermatic cord.

As the above enumeration suffices to show, the field is covered completely. The subject is handled with intelligence and authority. The author's views on the function of the prostate and the dangers of a catheter life are reiterated and will be received with more general acceptance than at the time of the previous edition, five or six years ago. He, in common with most British surgeons, gives the preference to suprapubic prostatectomy over perineal enucleation, which we favor in America. We were pleased to see that he continues to endorse the Bottini operation in proper cases.

C. C.

## Publications Received.

---

**J. B. Lippincott Co.,** Philadelphia, London, 1905.

*Catalogue of Medical and Surgical Publications.*

*International Clinics.* Vol. IV, 14th Series.

*Diseases of Society and Degeneration*, by Dr. Frank Lydston.

**G. P. Putnam's Sons,** New York and London, 1905.

*Life Insurance Examinations*, by Dr. Brandreth Symonds.

**P. Blakiston's Son & Co.,** Philadelphia, 1904.

*A Compend of the Diseases of the Eye and Refraction.* Gould-Pyle.

*Ten Lectures on Bio-Chemistry of Muscle and Nerve*, by D. D. Halliburton.

*Practice of Medicine*, by Dr. Daniel E. Hughes. 7th Edition.

**The MacMillan Co.,** Baltimore, 1905.

*Journal of Experimental Medicine.*

**F. A. Davis Co.,** Philadelphia, 1905.

*Eye, Ear, Nose and Throat Nursing.* Davis-Douglas.

*Practical Pediatrics.* Graetzer-Sheffield.

*Surgical Diseases of the Genito-Urinary Tract—Venereal and Sexual Diseases*, by Dr. G. Frank Lydston.

**E. B. Treat & Co.,** New York, 1905.

*A Practical Treatise on Nervous Exhaustion.* Beard-Rockwell.

### Miscellaneous.

*National Mosquito Extermination Society. Bulletin No. 1.*

*Report in Summary of Henry Clay Weeks on Sanitary-Economic Improvement.*

*Report on Mosquitoes, With Map; North Shore Improvement Association.*

*First Annual Report of the Henry Phipps Institute.* 1903-1904.

*Influence of Food Preservatives and Artificial colors on Digestion and Health.* Wiley-Bigelow.

*Report of the Commission for the Study and Treatment of "Anemia" in Porto Rico.*

*Transactions of the American Surgical Association.* 22nd Vol.

*Proceedings of the Orleans Parish Medical Society.* 1904.

*N. Y. Museum Bulletin.*

*Medical and Surgical Report of St. Luke's Hospital.* 1904.

*Summary of the Annual Report of the Library Committee of the College of Physicians for the Year 1904—Annual Report of the Kensington Hospital for Women.*

*Summary of the Annual Report of the Library Committee of the College of Physicians for the Year 1904.*

*Annual Report of the Kensington Hospital for Women.* 1903-1904.

## Reprints.

---

*Inaugural Address of the President of the N. Y. County Medical Association*, by Dr. F. J. Quinlan, LL.D.

*Medical Reserve Corps for the United States Army*, by Dr. Axel Ames.

*Surgery of the Prostate, Pancreas, Diaphragm, Spleen, Thyroid and Hydrocephalus*, by Dr. Benj. M. Ricketts.

*A Proctological Clinic*, by Dr. John L. Jeiks.

*The Nervous Symptoms Accompanying Pernicious Anemia*, by Dr. R. M. Van Wart.

*A Plan to Eradicate Syphilis, Chancroids and Gonorrhea*.

*The Size of the Articular Surfaces of the Long Bones as Characteristic of Sex: An Anthropological Study*, by Dr. Thomas Dwight.

*A Few General Directions with Regard to Destroying Mosquitoes, Particularly the Yellow Fever Mosquito*, by Dr. W. C. Gorgas.

*Overlapping the Aponeurosis in the Closure of Wounds of the Abdominal Wall, the Nature of the Intricacies for Fibroid Tumors of the Uterus; The Downes Electrothermic Clamps*, by Dr. Chas. P. Noble.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)  
FOR JANUARY, 1905.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	9	2	11
Intermittent Fever (Malarial Cachexia) .....			
Small Pox.....		1	1
Measles.....			
Scarlet Fever.....	2		2
Whooping Cough.....		1	1
Diphtheria and Croup.....	5	1	6
Influenza.....	13	10	23
Cholera Nostras.....			
Pyemia and Septicemia.....	1	1	2
Tuberculosis.....	60	42	102
Cancer.....	15	3	18
Rheumatism and Gout.....	1	1	2
Diabetes.....	1		1
Alcoholism.....	3		3
Encephalitis and Meningitis.....	4	2	6
Locomotor Ataxia.....	4		4
Congestion, Hemorrhage and Softening of Brain.....	29	10	39
Paralysis.....	2	1	3
Convulsions of Infants.....	1	1	2
Other Diseases of Infancy.....	18	12	30
Tetanus.....	5	9	14
Other Nervous Diseases.....			
Heart Diseases.....	43	31	74
Bronchitis.....	11	11	22
Pneumonia and Broncho-Pneumonia.....	47	29	76
Other Respiratory Diseases.....	4	2	6
Ulcer of Stomach.....	1		1
Other Diseases of the Stomach.....	3		3
Diarrhea, Dysentery and Enteritis.....	8	8	16
Hernia, Intestinal Obstruction.....	4	2	6
Cirrhosis of Liver.....	10		10
Other Diseases of the Liver.....	3		3
Simple Peritonitis.....	2		2
Appendicitis.....	1		1
Bright's Disease.....	49	21	70
Other Genito-Urinary Diseases.....	6	1	7
Puerperal Diseases.....	2		2
Senile Debility.....	29	13	42
Suicide.....	4	1	5
Injuries.....	15	19	34
All Other Causes.....	20	9	29
TOTAL.....	435	244	679

Still-born Children—White, 15; colored, 23; total, 38.

Population of City (estimated)—White, 239,000; colored, 86,000; total, 325,000.

Death Rate per 1000 per annum for Month—White, 21.84; colored, 34.04; total, 25.07.

## METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure ..... 30.26  
Mean temperature ..... 50.  
Total precipitation ..... 6.31 inches.  
Prevailing direction of wind, north.



# *New Orleans Medical and Surgical Journal.*

---

VOL. LVII.

APRIL, 1905.

No. 10

---

## **Original Article.**

---

(No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints may be had at reasonable rates if a **Written** order for the same accompany the paper.)

---

### **Therapeutic Paralysis.**

By WILLIAM F. WAUGH, M. D., Chicago.

When the writer was a medical student he heard an old practitioner remark that he confined himself exclusively to drugs produced by the chemist, eschewing all vegetable preparations, because the latter were so uncertain as to strength and effect, that every new sample required experimental administration until its exact powers were ascertained. The surprise occasioned, that a man should find this objection so serious as to induce him to throw away the entire vegetable materia medica on account of it, made an indelible impression on the hearer's mind.

On the other hand, there is a whole school of practitioners who claim that there is something in agents of organic origin that cannot be duplicated by the chemist, and that these alone should be employed as remedies. And until the entire mystery surrounding the conversion of inert extraneous matters into essential compo-

nents of the body and vitalized, is cleared up, we cannot well assert that there is nothing whatever in this idea. The employment of organic iron and lime in preference to these elements, as derived from destructive chemical reactions, shows that there is some disposition to acknowledge the possibility of truth in the hypothesis.

But apart from this consideration he would be a narrow and poverty-stricken clinician who would surrender the manifold virtues residing in the entire plant world. What we especially seek to direct attention to here is the fact that the above objection—the uncertainty as to strength—should have been so weighty as to cause such a complete surrender.

It is scarcely necessary to dilate upon the variability in the strength of tinctures and extracts. We all know it, how opium varies from no morphin at all to eighteen per cent; strophanthus from one to ninety; nux, cinchona, belladonna, ipecacuanha, ergot, digitalis, rhubarb—all the most commonly employed articles of the materia medica, are presented to us in such uncertain strength that we must test each new sample before we know just what degree of effect we are to derive from it.

The laity are quite aware of this fact. One woman observed to the writer that she had an unusually active sample of ipecac, that only required half the usual dose to cause vomiting. Another told how she only received a little paregoric for a dime at one drug store while at another she got four times as much; but the little from the first more than equalled in power the larger quantity received from the cheap dispenser.

Not that the chemicals are any more reliable. The writer bought tincture of iodine from four different pharmacies before he secured a specimen that would make a really brown stain on the skin. The others seemed to be about one-fourth the proper strength.

The result of this uncertainty as to the strength of drugs is timidity in their use at the beginning of an illness. No one needs to be told that this is the time for vigorous and well-directed effort on the part of the doctor. To break up a threatening attack before the malady has become seated is the acme of the physician's skill. But if he is uncertain as to the strength of his preparations he dares not give them boldly; and he does not know whether he is giving

enough, too much, or too little until he has tried, and by that time the opportunity for effective intervention has passed. So true is this that he gets out of the way of trying for such effects; he even argues that it is impossible to thus break up an attack, simply because he is unable to do it with the means at his disposal. He never gives a medicine except in a timid, hesitating manner, ready to change at the first sign of overdosing, and finally falls into therapeutic nihilism as a refuge from the dread that paralyzes him. He may become skillful in the guerrilla warfare of sick room hygiene, and even laud that as all there is in practice; but as an active modifying force in such conflicts he is useless. He preaches noninterference—because he does not know how to interfere intelligently; hygiene—because he dares not go beyond it; expectancy—because he is impotent to dominate the situation, and becomes simply a spectator in a conflict that passes before his eyes, but in which he is not a participant.

Is it essential and unavoidable that our glorious profession should be reduced to such inanity? Have we not the means of intervening actively and effectively for our patient's benefit—of earning our fees honestly?

We have at our hand the safest, most powerful and most manageable of remedies, in the active principles of plants, disengaged from their encumbering dross and separated so as to be presented each in a state of absolute chemical purity, uniform in strength and offering many advantages over the cruder forms of medication. They are not to be regarded as simply substitutes for the older forms, but as having a therapy of their own, which may or may not closely resemble that of the parent plant. They form the most valuable group of remedies at the disposal of the physician; their use enables him to accomplish what without them would be impossible; they dissipate doubt and uncertainty, and enable him to intervene powerfully at the *initus* of attacks, and to accomplish results that have not been claimed as possible since our fathers relinquished venesection.

The advocate of the active principles and the methods made possibly by their use feels the less hesitation in thus urging them upon his professional brethren, because he is not asking them to accept his word for this. They are the judges and jury; they may conduct the trials themselves; the agents recommended are not

proprietary, but can be supplied by any pharmacist, retail or wholesale. It is therefore with confidence in his audience that the writer submits his case to men each of whom is amply qualified to ascertain the value of the teachings presented. He will close with the suggestion that if he be in any degree right in his valuation of these principles, no physician can afford to deny himself the benefits of this method.

---

## Clinical Report.

---

### Old Chancroid of Penis, Mons Veneris, Groin and Inner Surface of the Thigh, of Two Years Duration, Cured by Grafting. \*

By JULES LAZARD, M. D.

Chief of Clinic to Chair of Surgery, Tulane University of Louisiana;  
Professor of Physiology and Urinology, N. O. College  
of Pharmacy, New Orleans.

It is not my intention in presenting this case to the Society to give an elaborate paper upon the symptomatology, pathology or treatment of chancroids, as these points may be brought out in the discussion. The condition of the patient has been of sufficient interest to me, because of the duration of the disease and simplicity of the treatment, to warrant my reporting it.

A. W. L., white male, aged 40, a native of Mobile, admitted to the Charity Hospital Sept. 14, 1903; discharged Oct. 31, 1904.

Family history: Father died at 87 of heart disease; mother, of yellow fever, does not know age; has two brothers living and in good health.

Personal history: Has had the usual diseases of childhood; typhoid fever in 1880; gonorrhea, four attacks, the first in 1894, the last in 1902.

Present illness: In October, 1902, patient contracted a sore, which appeared on the dorsum of the penis, the exact time after copulation he does not remember. He was treated by the local physicians with calomel, bismuth, peroxide, etc., with negative results. The ulcer continued to spread. About the middle of

---

\*Read before the Orleans Parish Medical Society.



November a bubo formed in his left inguinal region. The glands suppurated and were incised. Suppuration was profuse and the disease spread in all directions, slowly but very perceptibly. Being away from a hospital and other surgical care, the spreading of the disease was partly due to his own neglect of ordinary cleanliness. The condition seemed to reach its own limitation about July, 1903. After this time to date of admission it had not made any new encroachment on the surrounding tissue.

Examination on admission showed the man to be in poor condition; about five feet, eleven inches in height, weight about 130 pounds. A certain amount of anemia was present, though it was not of a pronounced type. Heart, lungs and kidneys were normal. The local condition involved the dorsum of the penis almost its entire length, the mons, the groin to about one inch to the inner side of the anterior-superior spine of the ileum (left side) about two inches in width, and the thigh two inches below the middle of the groin; this latter part was about one and a half inches wide.

The skin down to the fascia was destroyed in part; otherwise the corium was severely attacked. Over the thigh ulcer the form of the femoral artery could be seen and pulsation could be distinctly felt. The region of the ulcer appeared as if it was stripped of its skin and a piece of red plush carpet laid in its place—the granulations were about one-eighth of an inch above the surface and lapped the margin of the ulcer border. There was a discharge of thin pus without any particular odor.

A few days after admission the region was treated with actual cautery, after curetting, under chloroform anesthesia. In about ten days the original condition reappeared, the granulations sprung up like mushrooms. As total removal of the granulation was of no value, as far as cure was concerned, skin grafting was explained to him and suggested as a possible mode of cure, but he flatly refused.

He passed out of my sight but remained in the hospital. Some time in December, 1903, the operation of September was repeated—curetting, cauterization with carbolic acid, etc.—by the surgeon in charge at that time. Under similar conditions a similar operation ought to give the same results, and this is what happened, the patient, as before, was not benefited. The disease now seemed to reach about as far as it intended to spread and held to its outer limits with a dogged tenacity, not moving either way.

Later, in December, 1903, he went to bed with acute nephritis; albumin and casts appeared in his urine in quantity. His legs and thighs became edematous, his eyelids puffed, and other clinical manifestations of the disease were present; under appropriate treatment the kidneys regained their normal tone after a little while. He remained in bed until May, 1904, when I saw him again.

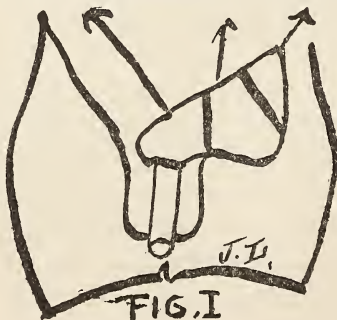
Grafting was again explained to him and he accepted the suggestion, having remained in bed about four of the six months' stay in the hospital. The ulcer at this time was about the same as some months previous. He was dressed regularly throughout the winter with the usual antiseptic coverings.

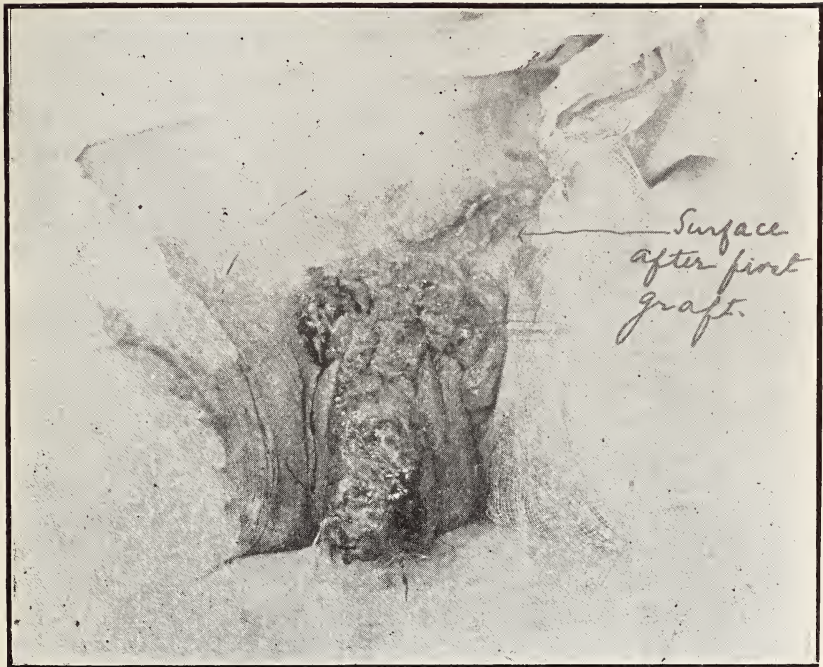
On June 16, 1904, the outer third of the inguinal region was curetted and the few Thiersch grafts, which had been removed from the inner surface of the opposite thigh, were placed over the region, tinfoil covering. Dressing removed one week later. The grafts had taken a firm hold. The grafts having so wholly and firmly taken wherever they were placed, it seemed that the ulcer was waiting for this new epidermic tissue before it would heal. The patient saw a possible cure in store and expressed himself in the expletives usual to the poor, but grateful patient, and punctuated his happy feelings with sighs of regret for having refused the operation eight months before.

In the photograph the smooth surface at the extreme outer limit of the ulcer are the grafts after the first operation.

On June 29, 1904, the same operation, with the same result, was repeated for the middle of the groin and the inner surface of the thigh.

On July 25, 1904, the mons veneris was curetted and covered. Good results, very little of the grafts being lost.





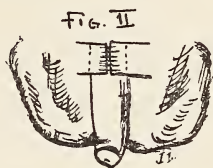
DR. LAZARD'S CASE.



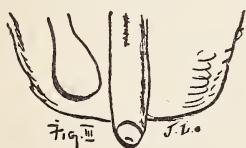


The fixed part of the large ulcer having entirely healed from this simple means, the penis from its mobility and variations in size, presented a problem which argued against extra-genital, epidermal grafts.

On July 27, 1904, the scrotum beneath the base of the penis was loosened and sutured over the curetted field for about one inch, making a sort of buttonhole idea. The penis was detached ten days later. Result good.



On August 4, 1904, the anterior two-thirds of the dorsum was curetted and a tongue-like flap about two inches long and three-quarters of an inch wide, after shrinkage, was removed from the right side of the scrotum and sutured obliquely over the penis. The gap left in the scrotum was sutured. Silk worm gut was the material used whenever a suture was required in the operation. About the tenth day, the flap having survived, the pedicle was cut, Schleich solution, and it was discovered that by some good fortune a fair sized artery had nourished the flap; when the base was cut there was a free jetting of the vessel.



About the latter part of August he became weak and anemic and his mind hazy; at times he became boisterous, yelling, cursing, crying, tearing the bar and bedding, until it became necessary to strap him to the bed.

Attention is here directed to the fact that in the Vicksburg hospital, where he first went for treatment, he was given the mixed treatment for many weeks, but his local condition spread, in spite of medication. After leaving the hospital he continued taking bichloride and the iodide. The dose of the bichloride he

does not know, but of the iodide he took regularly for five months, reaching as much as sixty-five drops three times daily.

At all events, when his mind became so distressed, we decided to give him a trial of the bichloride hypodermatically, and gave one-twelfth of a grain every forty-eight hours. This was kept up for eight days, but as there was no marked improvement we thought it best to discontinue its use.

I asked Dr. R. M. Van Wart to see the case and he decided that the best thing to do was to get the man out of bed, as there was nothing organically wrong with the brain, the disturbance being caused by some nutritional disorder, due probably to chronic infection. He also suggested food in greater quantity and to allow the man to exercise. At this time we controlled the mental condition with bromides and allowed the man to lie on the table in the sunlight, in the ward. He recovered from the mental condition in about two weeks.

About Sept. 20, 1904, the wound having made such progress, we decided to permit him to walk, but the muscles having been in disuse so long, from December, 1903, to September, 1904, ten months, they were adherent to each other. Under chloroform anesthesia the lower limbs were vigorously massaged and passive motion applied to the hip, knees and ankles. When he was able to get up he had to be carried to the dressing table. He had to learn the art of locomotion again, first crawling, then crutches, then a stick, until now, Jan. 27, 1905, he walks unaided and is able to make his own living, that of a journeyman sewing machine repairer.

The patient is here tonight for inspection.

I am especially grateful to Mr. J. M. Bodenheimer, interne of the service at that time, for his care and interest in the patient, and for the history of the case, which I am unable to reproduce in full, owing to the lack of space.

#### SUMMARY.

Extensive chancroids after a time lose their virulence and can be grafted as simple ulcers, and this can be hastened by actual cautery.

Suppuration does not preclude a good grafting result, if the grafts are not too extensive.

This case suppurated at all times and this was the reason of the great many stages of the operation.

Unless grafting or other plastic measures were resorted to, patient would have remained indefinitely in the hospital.

Unless the chancroid has lost its virulence it cannot be treated by grafting.

In grafting the penis it is best to use similar tissue, the scrotum if possible.

Nothing new is claimed in this case, only the field of plastic surgery extended.

(Chloroform used throughout, except where stated.)

---

---

## Louisiana State Medical Society Proceedings.

[EDITED BY PUBLICATION COMMITTEE.]

P. L. Thibaut, M. D. Chairman,

---

### The Upper Respiratory Tract as a Source of Systemic Infection.\*

By HOMER DUPUY, M. D., New Orleans.

Abundant clinical evidence can be cited to prove that diseased conditions in the upper air passages are not infrequently of systemic origin.

Theoretically, the converse of such a statement appears logical. Yet it is only within the last few years that a new chapter is being added to modern medicine by the accumulation of clinical and bacteriological data which prove most conclusively that the nose and throat, oftener than we suppose, are the portals of systemic infections.

The subject is so vast that I can only hope to touch its fringes and take a general survey of the most important diseases which enter the system through these passages. It is pertinent to preface by a brief inquiry into the anatomical conditions which permit the infectious agents to travel from these local foci into the general system. The rich blood supply to these areas, the thin mucous lining, exposed during the respiratory acts to the irritation of foreign particles in the inspired air currents; the presence, even

---

\*Read by title.

under normal conditions, of pathogenic micro-organisms in the vestibule of the nose, in the mouth and oro-pharynx, are all factors whose concerted influence must naturally render these parts more or less constantly exposed to bacterial invasion. But it is chiefly in the lymphatic tissue, which is distributed with great profusion along the upper air passages, that we find the anatomical points of least resistance. The tonsils (faucial and pharyngeal) are aggregations of lymphoid tissue, and as integral parts of the lymphatic system, are to be regarded as terminal nodes from which efferent vessels lead to the main lymphatic trunks. Goodale and other investigators have demonstrated that in the epithelial covering of the tonsils numerous gaps exist between the cells, through which the invading micro-organism can easily gain an entrance. Any weakening of the tonsillar surfaces by previous local morbid conditions, or the minutest abrasion of the parts, will favor the entrance of pathogenic organisms, which pass from these foci into the efferent lymphatics and are then carried in the main lymphatic vessels with a final passage into the general circulation.

The preliminary catarrhal stage of whooping cough, measles and scarlet fever, the initiatory symptoms of influenza, focussed usually in the nose and throat, are clinical facts which, while not yet reinforced by the more scientific bacteriological tests, strongly suggest that these infections enter through those parts which first bear the brunt of the attack. The unmistakable inflammatory reaction at the points of entrance of the micro-organisms causing these affections, with the immediate extension of the inflammation to contiguous and related parts, even before the general system shows any effect of the bacterial invasion, or absorption of toxins, are quite plausible arguments in support of this view.

It is not generally known that the larynx has been primarily invaded by the Eberth bacillus. Theoretical considerations, however, support the clinical evidence, for does not this particular micro-organism evince a predilection for lymphatic tissue. Peyer's patches, the more frequent seat of this infection, are intestinal tonsils, the larynx contains analogous lymphatic deposits in which there must reside a possibility of the primary implantation of the typhoid bacillus. Noteworthy is Prof. Gerhart's case of "Laryngo-Typhoid" (*Archives of Laryngology*, 1880), which presented typhoid ulcerations in the larynx at the very onset; the other typical



symptoms appeared in their regular order. Hall, Schuster, and Watson Williams report similar cases. In two cases, in which the entire fever began with the laryngeal invasion, cultures inoculated from the ulcers in the larynx revealed Eberth bacilli.

In the case reported by Williams the attending nurse and a friend from another ward of the hospital, who visited this patient, both contracted typhoid from the expectorations which the patient freely discharged on the bedclothes. In this instance also, the affection seemed at first to be focussed in the larynx.

The nasal chambers are now thought to play a most important role in that loathsome disease, leprosy. Sticker, Jeanselme and Laurens, at the Lepra Conference in Berlin in 1898, threw new light upon an obscure chapter in the etiology of this affection. Extended observations, fortified by bacteriological tests, lead to the conclusion that the initial lesion of leprosy occurred in the nasal mucosa.

A case which I examined at the Eye, Ear, Nose and Throat Hospital has a direct bearing on this most interesting subject. A white boy, aged 16, presented himself for the relief of nasal obstruction. Examination showed marked stenosis, caused by swellings on the septum and lower turbinals in both cavities, which presented the general aspect of tubercles. I could not explain the nature of these formations until a casual glance at the patient's face made me suspect leprosy. Fragments of the tubercles examined microscopically by Prof. John Archinard disclosed Hansen's bacillus. I am not prepared to affirm that these tubercles in the nose were associated with the primary lesion. But as the patient complained of nasal stenosis for several months and the cutaneous lesions, when he presented himself, were not those of the advanced stages, it seems probable that the nasal lesions were primary.

The tonsils, both the faucial and pharyngeal, have been aptly termed "physiological wounds," for beyond question they are most vulnerable structures, being rendered such by their peculiar anatomical arrangement. In quite a number of cases the faucial tonsils have proven to be the channel of infection in tuberculosis, pulmonary gangrene, Hodgkin's disease, and acute suppurative osteomyelitis. The importance of the tonsils as one of the routes of infection in pulmonary tuberculosis is obvious, and that such a danger exists is supported by numerous researches.

In Krickmann's investigations of many cases of fatal pulmonary tuberculosis the evidence showed that in children particularly the tonsillar infection was the primary lesion. Dieulafoy, Lermoyez, and Gottstein, by inoculating guinea pigs with cultures obtained from the post-nasal adenoids in children, establish that this structure is not infrequently the seat of a latent tuberculosis, which only awaits a favorable opportunity to invade the system. The frequency of glandular affections in children with hypertrophied tonsils is a common observation. When we seek an explanation for this association we must emphasize that primary tuberculosis of the tonsils is less rare than is generally believed, and the failure of these structures to inhibit the development of the bacilli results in an invasion of the cervical lymphatic glands, which gives us a clinical picture often seen yet seldom correctly interpreted. It is evident that the "direct inhalation theory" of phthisis does not explain all. In fact the weight of authority inclines to the view that lymphatic structures with their efferent lymph channels are the chief avenues of tubercular infection.

Numerous other pathogenic micro-organisms gain an entrance into the system through the upper air tract, and in some instances leave only a slight reaction at the point of entrance, while some distant structure receives the full force of the infection. Not a few cases are recorded, and how many are unrecorded, in which an apparently mild attack of tonsillitis is followed by acute endocarditis, with a fatal issue. The original tonsillar inflammation may be of a virulent type, but it oftener appears to be a simple tonsillitis, which, from its very mildness, misleads us in ascribing to the cardiac affection its true cause. Cases of this nature are not to be confounded with the cardiac affections following the angina of acute articular rheumatism, which disease is now considered by many clinicians to be due to a micro-organism which enters the system through the faucial tonsils. In such instances either a previously diseased tonsil invites a specific infection through its weakened tissues, or the particular micro-organism of this affection, which still remains undiscovered, implants itself in the tonsil at the very onset, making this structure the portal of entrance.

The occurrence of spasm in the muscles supplied by the facial has been sufficiently emphasized by the number of cases recorded

in the current literature. Its possible importance in the causation of acute nephritis has been thought worthy of consideration, particularly by the French authors, both in their text books and in their periodical literature. Morse, of Boston (*Arch. Pediatrics*, May, '04), reports four cases of acute tonsillitis followed by nephritis, and in which scarlet fever or previous disease of the kidneys were positively excluded.

#### CONCLUSIONS.

1. It is chiefly due to its rich lymphatic supply that the upper air tract is capable of transmitting infections into the system.

2. The tonsils, both the pharyngeal and faucial, are a positive source of systemic infection by various pathogenic micro-organisms.

3. The protective function of the tonsils is limited, and when these structures are diseased they remain a constant menace to the general economy.

4. It is highly desirable to arrest or at least to mitigate the acute infectious inflammations while the process is limited to these parts, so as to protect the heart and other vital organs.

5. Prophylaxis addressed to the upper air passages will consist essentially in nasal and post-nasal cleanliness, the ideal being attained when nasal washing becomes as systematic and as universal as the use of the tooth brush.

---

#### Remarks on Facial Spasm, with the Report of a Case of a Rare Form of this Affection and a Note on the Treatment.\*

By ROY M. VAN WART, M. D., New Orleans.

The occurrence of spasm in the muscles supplied by the facial nerve is not uncommon. The spasm may be tonic, clonic or mixed. It may involve all the muscles of the face but is more commonly limited to those surrounding the eye and mouth. In exceptional cases the depressor anguli and platysma may be involved and rarely, as in one case here described, the extrinsic muscles of the ear. Tonic spasm is seen in tetanus and in the contracture following facial paralysis, due to central lesions. The clonic form is seen in epileptic and hysterical attacks.

The clinical study of these cases leads to the recognition of two

---

\*Read by title.



great types—those which have a basis in some physical disturbance, known as habit spasm, mimic spasm or the convulsif, and those which arise from some organic or reflex cause.

The second group mentioned may be still further divided into two classes; first those which are the result of some lesion in the course of the facial nerve, its nucleus or cerebral connections, and secondly those which arise from some peripheral irritation in the region of one or the other of the cranial nerves, most frequently the second or the fifth and those for which no cause can be found, and for want of a better term are called idiopathic.

The first class includes cases of spasm arising from irritation of the cortex or subcortical tissues in the region of the face centre, as from pressure by a tumor, hemorrhage or depressed fracture. These are examples of Jacksonian epilepsy. A lesion between the cortex and the nucleus of the facial nerve may be either irritative, as a tumor, or destructive, as in the ordinary intra-capsular hemorrhage. The spasm will be similar to the Jacksonian attacks in the first case. In the latter it may cause a tonic spasm on the paralyzed side. Pressure on the nucleus of the seventh nerve or along the course of the nerve, as in the case to be described, will cause local facial spasm followed later by paralysis.

Case 1. The patient, a white male, *aet.* 42, first came under observation in January, 1902, complaining of persistent headache, which, at times, kept him awake at night. His family history was unimportant. He had had the usual diseases of childhood and an attack of typhoid fever at 20. He denied syphilis. At the time he was first seen the headache had troubled him for four weeks. Examination at that time elicited no other symptoms. He disappeared and it was only in January, 1903, that he was again seen. He complained then of persistent headache and had become completely blind. He had had several attacks of clonic convulsions, limited to the right of the face, and this caused him again to seek advice. He described these as twitchings involving the whole of one side of the face. They usually lasted he thought about two minutes. After the attack there was some paresis of the right of the face, which persisted for two days, gradually passing away. They were unaccompanied by pain. He had had no vomiting and no general convulsions. There was a complete atrophy of both optic nerves, evidently post-neuritic. There was no



sensory disturbance of any kind. The reflexes were all exaggerated, more so on the right than on the left side. The patient was again lost sight of and in July, 1903, I was asked by his physician to perform an autopsy.

The head only was examined. This revealed a circumscribed tumor about the size of a walnut on the right side of the cerebellum and pons, just posterior and pressing against the petrous portion of the temporal bone. It pressed against the inferior surface of the tentorium and had deformed the surrounding brain structures. The roots of the seventh, eighth and ninth nerves were spread out over the tumor and partially involved in its substance. The tumor proved to be a spindle celled sarcoma arising from the membranes. It did not at all involve the brain substance. The seventh and eighth nerves were spread out over the tumor and were partly infiltrated by the growth.

This somewhat fragmentary history is included here to illustrate the organic type of facial spasm. Cases due to peripheral irritation by tumors are not common, but have been previously noted by Schultze, Vuss and others.

The second case is included in the other class mentioned. It is not necessary to consider the central connections of the various cranial nerves beyond calling attention to the fact that irritation of the sensory cranial nerves, when experimentally induced, will cause reflex contraction of the facial muscles. A strong light causes closure of the eyes when suddenly thrown on the cornea. Irritation of the cornea or conjunctiva will cause similar closure of the eye. It is, therefore, not difficult to understand that any interference with the function of the second or the fifth nerve would, if long continued, set up the disturbances known as blepharospasm, or even spasm in the entire distribution of the facial nerve.

This class of cases is well known to the oculist and it is sufficient to say that a careful examination and subsequent correction of the disturbance of vision found will relieve certain of them.

There still remain, however, a number of cases in which either no visual disturbance is found or in which correction of that found produces no improvement. It is to this class that the following cases belong.

The patient, a white female, unmarried, *aet.* 55, was admitted to the Charity Hospital in November, 1903, complaining of "St.

Vitus Dance in her right ear." There was nothing of any importance in her family history. She was born in Mississippi, but had lived most of her life in Louisiana. She had measles when 24 years of age and typhoid fever when 45. She had had occasional attacks of "chills and fever." She occasionally used alcohol. There was nothing further of importance.

Her present trouble commenced when she was 23 years of age. She was washing, about 9 o'clock in the morning half a mile from her home, when she felt "queer." She stopped work and walked home. On reaching the house she found on looking in the glass that her right ear moved upwards and downwards in a curious fashion. She felt dizzy for a short time, perhaps two hours. Since that time the movement has been almost constantly present. She has, however, been free for two or three weeks at a time on several occasions when under treatment. The motion, however, invariably returned. It varies in rapidity and may be absent for periods of fifteen minutes. It increases on observation. She complains that when it is worst her face feels tired. This is worse toward night than in the morning. She does not remember of having had pain. The movement prevents her going to sleep at night. The nurse informs me, however, that it is not present during sleep. She has swimming attacks, during which the movement is worse. She has had no headache. She has had no vomiting except in an occasional bilious attack. She has had no general convulsions. She thinks she has had some cramps in her legs, but the history is very indefinite. She has had no diplopia. She has tried many forms of treatment with no benefit. She has worn glasses for twelve years. Her appetite is good.

The examination shows a poorly nourished, middle-aged woman. Her skin is wrinkled and parchment like. Her mucous membranes are pale. Her education is deficient. She can read but is unable to write. She presents no striking abnormality. Her speech is peculiar, owing to the loss of her teeth.

She has a slight cough, and examination reveals consolidation at the apex of the left lung. The sputum contained tubercle bacilli. The other organs showed nothing. The urine was negative.

The Nervous System.—The first and second nerves were objectively and subjectively normal. The pupils reacted to light directly and consensually and to accommodation. The third, fourth

and sixth nerves were normal. There was no nystagmus. The fifth nerve showed no disturbance of motion or sensation. There was no jaw clonus. Pressure over the points of exit of the branches of this nerve produced no result.

The right auricle moves upward and backward in a curious twitching manner. It moves about a quarter of an inch. The rate varies. The most rapid was fifteen per minute. The slowest, once in three minutes. It becomes more rapid when observed. It never involves the whole facial, but seems confined to the attollens auriculam and the retrahens, chiefly the former. At times when most rapid the occipito-frontalis seems to be involved, but this is difficult to accurately determine.

The movements of the face are normal and equal on the two sides, though the corner of the mouth seems at times to be drawn slightly to the right. There is at times a slight movement in the helix, due probably to the presence of an abnormally developed helix major. The movement is at times curiously rhythmical.

The reflex induced by tapping the supraorbital nerve is normal on the left side, but on the right side there is a contraction of all the muscles supplied by the facial nerve. Tapping of the facial nerve produces on the left side no result; on the right side it causes the movement in the ear previously described. The patient complains of loss of hearing, but objective examination fails to reveal any impairment. The other cranial nerves were normal. The examination of the nervous system was otherwise negative.

A careful examination of the nose, mouth and pharynx revealing nothing, the supraorbital branch of the fifth nerve was cocaineized by injecting cocaine into the nerve at its exit from the orbit. This was followed by a cessation of the movements of the ear for about half an hour. It was repeated on two different occasions with a similar result. Cocainization of the other two branches produced no such effect. The patient was advised to allow excision of the supraorbital branch of the fifth nerve, but after considering the matter, refused to be operated on.

A search of the accessible literature has shown only two similar cases. The description of the case reported by Romberg is here given. "It is most rare to find the spasm proceeding from auriculo-muscular branches of the facial nerve. Hitherto I have only met with one case of this kind, which presents itself vividly to



my recollection. It occurred in a woman, aged 49, who was attacked 27 years ago with apoplexy, accompanied by paralysis of the right arm. Her recovery was slow.

Weakness of the right arm and headache, show the persistence of a cerebral affection. At the same time spasmodic movements of both ears occur several times every day, and especially after emotions, during which they are drawn up and down with great rapidity for five to ten minutes at a time. The spasm is always accompanied by loud tinnitus aurium. No convulsive movements are met with in other parts of the body.

"In another case I saw a cramp of the ears precede the epileptic seizure, and thus take the place of the aura.

"The great variety of auricular spasms in man, accords with the fact of these nerves being withdrawn from the influence of the will."

This explanation is, however, not entirely correct, as the writer has seen several cases where the extrinsic ear muscles could be moved at will. This case differs from that reported, in that it was probably the result of a central lesion. Bernhardt has noted a similar case.

There is another large group of cases in which facial spasm occurs as a reflex to peripheral pain. In nearly all cases of trifacial neuralgia this occurs, and usually disappears as the attack subsides. It is usually tonic and occurs with each paroxysm, relaxing as the pain disappears.

It is to be regretted that operation was refused, in view of the fact that Starr has reported several similar cases as permanently relieved by operation.

Many other forms of treatment have been devised. A few may be mentioned, as the injection of iodine, chloroform, preparations of arsenic and other irritants, stretching the facial nerve; the use of the thermocautery and blisters, and freezing the nerve-bases, have been reported from all methods and many failures. Nothing that is new has been added in this paper, but it is hoped that attention has been called to the fact that these cases are not altogether hopeless, and that the methods of study by which the causative factor is to be ascertained has been indicated.

In conclusion I wish to express my thanks to Dr. P. E. Archibard for the privilege of reporting the second case.



*Note.*—Since the above was written McCarthy has reported a case of tic, limited to the ear muscles in a girl. This arose from a habit of voluntarily moving the ear; a persistent tic later developed.

---

## Society Proceedings.

---

### Orleans Parish Medical Society.

---

*President*, DR. L. J. LEBEUF.

*Secretary*, DR. ALLEN EUSTIS.

141 Elk Place, New Orleans.

In charge of the Publication Committee, DR. ALLEN EUSTIS, Chairman,  
DRS. JULES LAZARD and H. DUPUY.

---

MEETING OF FEBRUARY 11, 1905.

Dr. GESSNER read a paper entitled:

#### **"The Matas Operation for Aneurism: Report of a Case."**

Geo. D., colored male, 32 years old, brickmason, from New Orleans; admitted to ward I, Charity Hospital, New Orleans, June 21, 1904.

**DIAGNOSIS:** Aneurism right popliteal artery, involving the middle and lower portions.

**EXAMINATION OF ORGANS:** Circulatory apparatus—left ventricle hypertrophied; no murmurs; some degree of arterio-sclerosis; respiratory organs normal; liver ditto. Urine report, 6,22; acid, 1019, leucocytes, bladder epithelium, mucous casts, bacteria, mucus.

**HABITS:** Pretty steady drinker of beer, wine, whiskey, etc., up to three weeks ago.

**PERSONAL HISTORY:** Had gonorrhea four years ago, syphilis also four years ago, with one year's treatment. Has also had whooping cough, measles, chicken pox, malaria. First noticed pain and swelling in the limb two months ago.

**FAMILY HISTORY:** Both parents were in good health, aged about 55 years, five years ago; has seven brothers and sisters in good health; one sister is dead, of pulmonary tuberculosis. No disease prevalent in family.

CONDITION ON ADMISSION: Inspection, palpation and auscultation revealed the signs of aneurism in the middle and lower portions of the right popliteal region; pulsation, expansile in character, thrill, systolic murmur. Dr. John Smyth, who saw the case with me, brought out the expansile character of the pulsation very clearly by placing the two forefingers on the lateral walls of the swelling, the separation of these two fingers with every pulsation showing the expansile character of the pulsation distinctly. The murmur could be heard above and below in diminished force. Pulsation was absent in the posterior tibial artery behind the malleolus, only slightly palpable in the dorsalis pedis. The leg was kept slightly flexed, extension being painful. Pain was described as "thumping," and sometimes of a burning character. The tumor was five inches in the long axis of the limb by four and one-fourth inches wide. In extension the right knee measured fifteen and one-half inches in circumference, the left thirteen and one-half at corresponding levels.

In flexion the circumference of the affected (right) side was fifteen and three-fourths inches when the femoral artery was suppressed and the tumor massaged toward the foot; on releasing the artery the measurement increased to sixteen and three-eighths inches, a difference of three-eighths of an inch.

TREATMENT AND FURTHER OBSERVATIONS: For the relief of pain codein sulphate was given in one grain doses every hour for three doses, then in one-half grain doses every three hours. Strychnin sulph., gr. 1-30, was given every four hours for twelve hours before the operation.

This was performed by me on June 23, with Interne P. B. Salatich giving the anesthetic, Dr. John Smyth and Internes W. E. Sistrunk, E. L. Leckert and S. L. Thetford assisting, Mr. R. Lyons recording. Ether, three and one-half ounces, was given from 9:55 a. m. to 11:36 a. m.; the operation proper lasted from 10:16 to 11:36.

With an Esmarch constrictor in position an incision was made in the median line posteriorly; this exposed the internal popliteal nerve, which was retracted inward. The incision was now carried through the aneurismal sac. No clots whatever were found. The interior presented a thin layer of laminæ and fluid blood. The lower opening was found early, being quite superficial and to the

inner side; dark blood was escaping from it in small quantity. This opening, which was quite oblique, was at once sutured with a continuous Lembert suture of No. 1 chromic catgut. After a prolonged search, during which the sac was split up to its full extent, the upper opening was found directly above the lower at a distance of one inch. (The aneurism had evidently developed toward the anterior and external aspects of the artery.) It had been hidden from view by a fold of the sac; dark blood was escaping from this opening also. No. 3 chromic catgut was used in the form of a continued Lembert suture for the closure of this orifice. Removal of the constrictor was followed by escape of bright arterial blood, showing either that the closure was defective or that some collateral existed, the opening of which (quite near by) had escaped detection. Complete hemostasis was effected by a massive Lembert taking up at least an inch bite of sac wall on either side. The result of this step was the firm approximation of the walls of the aneurism in the upper third, with a resultant approximation of the remaining two-thirds of the sac wall, so that no Neuberizing was necessary to do away with any dead space. A small iodoform gauze drain was introduced into this lower, unsutured portion of the aneurismal cavity. The skin wound was narrowed with silkworm gut. At the termination of the operation pulsation could not be felt in the dorsalis pedis. The usual aseptic gauze and cotton dressings were applied, with a cardboard gutter splint posteriorly. The foot was elevated about four inches. First dressing four days later; a moderate infection existed; iodoform pack replaced by a smaller one. Foot warm; pulsation perceptible in dorsalis pedis. The infection diminished steadily; patient sat up July 21; on August 15 his wound was entirely well. There was no pulsation whatever; a slight tendency to edema was observed.

Examination on Sept. 3 showed the following condition of affairs: Patient in excellent health. General appearance of limb good; walks with little stiffness (has been walking moderately since Aug. 15); scar hypertrophied, with a little erosion due to friction of clothes and bad management of scab. Circumference of limb at middle of scar fifteen and three-eighths inches as against fourteen and three-eighths inches for opposite limb at same level. This difference is attributable to the hypertrophied scar on the one hand and on the other to the presence of the aneurismal sac, which was left

in situ at the time of operation. To the outer side of the lower one-fourth of the scar is non-resistant swelling which I take to be a venous dilatation, probably in the upper portion of the external saphenous. Neither here nor elsewhere in this region is there any sign of aneurism. Pulsation is palpable in the dorsalis pedis, not in the posterior tibial behind the malleolus.

COMMENT: The writer had had not only the good fortune to read Dr. Matas' complete and lucid account of his life and limb-saving method of treating aneurism by operative interference, but also the privilege of assisting him in at least two of his cases, one femoral, the other popliteal. The good results observed after these operations, and the disastrous ones known to have resulted from other methods, led to the adoption of the method.

I believe this case to have borne out one of the important claims made for the method, viz., non-interference with the collateral

YEAR.	CURED.	IMPROVED.	UNIMPROVED.	DIED.
1884.....	1	1	.....	1
1885.....	1	.....	.....	.....
1886.....	1	.....	.....	.....
1887.....	.....	.....	.....	.....
1888.....	3	1	.....	1
1889.....	.....	.....	.....	.....
1890.....	1	.....	.....	.....
1891.....	.....	.....	.....	.....
1892.....	.....	.....	.....	.....
1893.....	1	1	.....	.....
1894.....	.....	.....	.....	.....
1895.....	2	1	.....	2
1896.....	1	.....	.....	1
1897.....	3	.....	.....	.....
1898.....	.....	.....	.....	.....
1899.....	1	2	.....	1
1900.....	.....	.....	.....	.....
1901.....	.....	.....	.....	.....
1902.....	1	2	.....	1
1903.....	1	.....	1	.....
Total .....	17	8	1	7

Cured.....51.51 per cent.      Unimproved... 3.03 per cent.  
Improved.....24.24 per cent.      Died .....21.21 per cent.

The above table includes cases of popliteal aneurism from the records of the Charity Hospital, 1884 to 1903.



circulation. It was evidently a case of recent origin, as shown by the fact that the patient, an intelligent man, had noticed it but two months before, and by the complete absence of clot, with but slight lamination. In spite of this recent development, but little time having been allowed for collateral circulation to develop, the limb was supplied with blood after operation, pulsation being observed in the dorsalis pedis at the end of four days. Again, the statement that a moderate degree of infection is not incompatible with success was confirmed; this fact makes the operation more generally applicable, not restricted to specialists operating under specially favorable conditions.

The technic varied but little from that described by Dr. Matas, the variation consisting in the fact that the walls of the aneurismal sac were brought together directly instead of being turned in on themselves after the method of Neuber.

#### DISCUSSION.

DR. PERKINS stated that the method of Dr. Matas had received recommendation at the last meeting of the A. M. A., but that he did not agree with Dr. Gessner that it was a better method for the unskilled surgeon, as he considered it was too grave an operation for these to handle. It was too early to tell what would be the outcome, from statistics, and he was anxious to know what would be the final result in a case of chronic fusiform aneurism in which the method was employed. He believed it was the ideal operation in cases of traumatic saccular aneurism. He reported two cases of aneurism at the Charity Hospital, one of which was treated and cured by digital pressure. This case had to be kept under the influence of morphia during the entire time, and his experience with this case persuaded him that it was next to impossible to cure aneurism by pressure, except under the most favorable conditions. The Matas method was certainly better than digital pressure.

DR. PARHAM reported a case which he had operated upon by the Matas method last December. The patient was a white male, aged 55, who, while walking in the mountains last August stepped on a round stone and gave his leg a wrench. Following this accident pain began in the popliteal region, with subsequent develop-

ment of a pulsating tumor. The doctor saw him early in December and made a diagnosis of popliteal aneurism, and on Dec. 12, 1904, under a general anesthetic an Esmarch bandage was applied from the toes up to middle of thigh, a constrictor put on and the bandage removed. A straight incision was made down the middle of the tumor. On incising the sac there was considerable hemorrhage, chiefly venous, and was found necessary to tighten the constrictor in order to proceed with the operation. He finally located the upper opening, from which a groove ran in the direction of the artery, but very superficially. He sutured the upper opening with chromicized catgut, with a round needle. Following the groove downward, after some difficulty, he found the lower opening, which was sutured also. A continuous suture was then passed, so as to close the above mentioned groove from the lower to the upper opening. It was impossible to invaginate the skin and sac according to the method of Neuber, and therefore the sac wall and skin were simply approximated with sutures. No drainage was employed. Before closing the skin, after removal of the tourniquet, there was considerable venous hemorrhage, which was controlled by lateral ligatures applied at various points. Nearly a week after the operation the wound opened and discharged a quantity of pus, which required three weeks' treatment to overcome. The patient at present is up and about, apparently cured, but with some slight pulsation at the upper extremity of the sac, which the doctor thought was perhaps the pulsation of a very superficially placed artery at the site of the upper opening caused by the closure of the upper opening. There has been no pulsation perceptible in the tibial artery. The operation devised by Dr. Matas was certainly preferable to the old Antyllus method or its modifications, and he believed that it was based upon rational principles. In the fusiform variety of aneurisms, however, the doctor had feared that there was danger of a repetition of the aneurism, owing to the disease of the vessel at the site of the upper opening, but he believed the danger with suturing was much less than with ligature, since the suture simply approximated without constricting, as was the case with the ligature.

In the simple sacculated form of aneurism, where the opening could be sutured and the artery left fully restored, he believed the operation was ideal.

DR. MATAS had examined Dr. Gessner's patient several weeks after the operation and was able to confirm the excellence of the result. Dr. Matas was at present engaged in collecting the cases of aneurism by the method which he has advocated and thus far has been able to obtain reports of sixteen cases operated in various cities in the Union, since the publication of his paper in the *Annals of Surgery*, February, 1903. Thus far, all the cases, except two, had involved either the femoral or popliteal; in two, operated by himself, the brachial and axillary had been involved. In all the cases thus far reported the immediate results had been good; no gangrene had followed in any case. In several the continuity of the parent artery had been restored (Morris, Matas, Barrow, White, W. Meyer). In one case (Morris, New York), a very diseased popliteal artery, the aneurism had recurred one year after, compelling amputation of leg. There was no gangrene in this case, but the patient refused further conservative operations which might have been attempted. Dr. Matas' first case was operated in March, 1888, and he had positive knowledge of the permanency of the cure two years after the operation, after which he had lost sight of the patient. He now knows of at least three cases in which over three years had elapsed since the operation without evidence of relapse. All the operators testified to the simplicity of the operation when performed in all conditions in which preliminary control of the circulation could be obtained. Binnie had put it in his characteristic way, saying: "It was as easy as rolling off a log." The object of the operation was to simplify the technic of the radical cure of aneurism so as to perform a radical operation with a minimum risk of gangrene. The chief point to be borne in mind was to disturb the collateral circulation as little as possible by confining the operative act as much as possible to the *interior* of the sac. The fundamental point was to obliterate the vascular orifices in the sac by suture; the restoration of the lumen was a secondary condition to be thought of only in sacciform aneurisms with a single orifice of communication with main artery, or, in traumatic aneurisms with firm, sound and resisting coats. He believed that while the restoration of the lumen of the main artery appealed to the surgeon as an ideal desideratum, it was not at all necessary to the success of the operation; the results being apparently just as good (from the experiences thus far gathered)



when the vascular orifices in the sac were entirely obliterated by suture, provided the collateral circulation around the sac, and the sac itself were not disturbed. Since the results were just as good by simple obliteration of the orifices of supply, he saw no reason for arterioplasty when this might possibly lead to a recurrence of the aneurism in very atheromatous cases. Arterioplasty, or the restoration of the lumen of the parent vessel, was to be resorted to only in an exceptionally favorable and restricted number of cases.

DR. GESSNER, in closing, stated that the technic of the operation was very simple, and he could not agree with Dr. Perkins that the operation was too severe for anyone except a specialist. He remembered a case that he had seen in which pressure was tried, but with no results, and upon whom an operation was necessary.

DR. GESSNER read a paper entitled:

**"A Case of Tetanus Successfully Treated by the Intraneural and Subarachnoid Injection of Tetanus Antitoxin."**

John L., colored male, aged 18 years, laborer by occupation, gives Scranton, Miss., as his home. He was admitted to ward I, Charity Hospital, New Orleans, La., on Sept. 9, 1904, suffering from railroad injury of the right foot and a slight lacerated wound of the scalp. The foot injury consisted of a compound, comminuted fracture of the second and third toes, a large lacerated wound on the dorsum of the foot, extending from the base of the toes back for about two inches, a deep lacerated wound on the plantar surface between the big and second toes and a deep lacerated wound of the plantar surface just above the fourth toe. He arrived at the Hospital on the day of the injury, his foot covered with a red signal flag. The foot was cleansed and a wet bichlorid dressing applied.

Nothing noteworthy was observed until the 19th of the month, ten days after admission, when he complained of his "palate being down." This rather commonplace complaint for one of his race received no special attention. On the following day, the eleventh of his injury, he made the same complaint. At this time some stiffness of the jaws was observed; the facial muscles were fixed in a characteristic expression; the neck was stiff; the back was stiff, with moderate opisthotonos; the abdominal muscles were rigid; the patient in assuming the sitting position from the recumbent



had to get up sideways. The temperature ranged up to 102.2° F. The patient was at once taken to the amphitheatre, where his back and his right lower extremity, from the foot to the groin, were thoroughly prepared by Mr. S. L. Thetford, Interne. With assistants supporting the patient in something like the scorching position, I passed a needle into the spinal canal between the eleventh and twelfth dorsal vertebrae. One hundred drops of cerebrospinal fluid were lost by actual count, plus perhaps a half dozen more while fitting a syringe to the needle, and 162 *m.* of tetanus antitoxin were injected slowly. Before withdrawal of the needle five *m.* of a four per cent cocain solution were injected and the needle was pushed forward to its full extent for the purpose of lacerating the cord and facilitating the contact of antitoxin with spinal tissue. The needle puncture was sealed with cotton and collodion. Ten *c.c.* of antitoxin were injected into the foot between the metatarsals on the central side of the old injury. The anterior crural nerve was exposed just below Poupart's ligament and ten *c.c.* of antitoxin injected into it; ten into the tissues around it; finally the sciatic was exposed in the middle of the thigh and ten *c.c.* of antitoxin injected into it, a total of fifty *c.c.* used at this time. Some whiffs of chloroform had been given during the sciatic manipulation, the spinal analgesia being insufficient.

A Liston splint was applied to the extremity. Chloral hydrate gr. X., potassium bromid gr. XX were given every three hours, liquid nourishment every two hours; absolute quiet was maintained.

Sept. 21, (third day of tetanus). Slight tendency to convulsion; patient startled by approach of Sister with food; tells Sister she frightens him; nourishes well.

Sept. 22. Chloral and bromid, same doses, given every four hours.

Sept. 23. Slightly relaxed.

Sept. 24. Temperature normal.

Sept. 26. Distinctly better, physically and mentally; chloral and bromid reduced to five and ten grains every four hours, respectively.

Sept. 29. Sits up easily, opens mouth to full extent; face still fixed; abdominal muscles rigid. Neck quite mobile. Chloral and bromid discontinued.

Sept. 30. Light diet.

Oct. 2. Regular diet; primary union of the sciatic and anterior crural nerve wounds.

Oct. 23. Discharged cured.

Feb. 4. Was in Hospital with cutaneous affection; no affection of spinal cord evident as a result of the puncture, so far as known. No neurologic examination.

COMMENT. The case was a mild one, the period of incubation being ten days; it was taken early, within the second twenty-four hours of the first symptom's appearance. Perhaps the case would have recovered under any other mode of treatment. Yet the rapid involvement of the muscles showed it to be not of the mildest class. Again, the improvement was so prompt, the cure so rapid, that I believe the case to have shown, so far as one mild case can show, that the combined intraneural and subarachnoid treatment is a promising one.

YEAR.	CURED.	IMPROVED.	UNIMPROVED.	DIED.
1884.....	1	.....	1	3
1885.....	3	.....	.....	9
1886.....	.....	.....	.....	5
1887.....	.....	.....	.....	12
1888.....	1	.....	.....	7
1889.....	2	.....	1	4
1890.....	2	.....	.....	8
1891.....	1	2	1	5
1892.....	1	1	.....	7
1893.....	3	.....	.....	8
1894.....	.....	.....	.....	16
1895.....	.....	.....	.....	24
1896.....	5	1	.....	15
1897.....	11	.....	.....	9
1898.....	2	1	.....	13
1899.....	.....	.....	.....	14
1900.....	2	1	.....	10
1901.....	5	.....	.....	5
1902.....	2	.....	.....	6
1903.....	6	1	2	15
Total .....	47	7	5	195

Cured.....18.33 per cent.      Unimproved... 1.95 per cent.  
Improved..... 2.73 per cent.      Died .....76.05 per cent.

The above table includes cases of idiopathic, traumatic, and acute tetanus, eliminating cases of trismus nascentium, chronic trismus from other causes.

I regret that the diagnosis was not confirmed by the finding of the drumstick bacillus in the wound, no specimen having been submitted for examination. However, I believe that a visiting surgeon of Charity Hospital in his tenth year of service may take it upon himself to diagnosticate tetanus clinically without overstepping the bounds of modesty.

Appended is a table of mortality from the Charity Hospital reports for 1884 to 1903, inclusive:

#### DISCUSSION.

DR. HALSEY stated that while in Germany he had done some experimental work with the tetanus toxin and antitoxin, and for that reason he was especially interested in the paper of Dr. Gessner. The mortality in tetanus, according to Celli's statistics, is twenty-two per cent; however, these statistics are not in accordance with those of men outside of Italy, who place it at from fifty to ninety per cent. The tetanus toxin acts primarily upon the cells of the anterior gray horn of the spinal cord. The tetanus varies from other disease in that the period of incubation is not constant. In dogs the period of incubation is three days, and in frogs, in hot weather, it is eight days. In man the period of incubation varies from six to ten days after the introduction of the toxin into the body. No matter how much tetanus toxin is injected into an animal the period of incubation for the particular animal is not shortened; however, the manner in which the toxin is introduced into the animal will affect the period of incubation. If injected subcutaneously the period may be seventy-two hours, if into a nerve trunk the period may be twenty-four hours or less, while if injected into the spinal cord symptoms of tetanus will appear in from one to two hours. These experiments were carried on by Meyer and Ransom and they showed conclusively that the tetanus toxins travel by the nerve trunks. Marie and Morax and Meyer and Ransom showed that if the tetanus toxin be injected subcutaneously, and if the organs of the animal be examined after some time, toxin will be found only in the nerve tissue. They further injected equal amounts of tetanus toxin into both hind legs of a dog and into one hind leg of the dog they injected antitoxin subcutaneously, while in the other hind leg they injected the antitoxin into the nerve trunk. They found that tetanus symptoms

developed in the leg in which the antitoxin had been injected subcutaneously, but not in that leg in which the antitoxin had been injected into the nerve trunk. These experiments tell us that if the tetanus toxin has been introduced into the body and is on its way to the spinal cord, it is possible to prevent its reaching the spinal cord by injecting antitoxin into the nerve trunk. The antitoxin cannot penetrate into the spinal cord itself and hence it is necessary in spinal injection to introduce the antitoxin into the tissue of the spinal cord. He did not mean, however, that subcutaneous injections of antitoxin should not be given, as there is always a certain amount of toxin in the circulating blood and it is advisable to neutralize this toxin. The intraneural method of injection was, in his mind, preferable and it is advisable to inject as many nerve trunks as possible with the antitoxin. He thought the subdural injections of eucaïn a rational procedure in cases of tetanus, as the object of treatment should be to diminish the reflexes as much as possible.

The reason that tetanus antitoxin diffuses into the nerves and spinal cord with difficulty is probably due to tetanus antitoxin being a globulin.

DR. VAN WART stated that the changes in the nerve cells in the spinal cord were first described by Brunner in 1894. The cell alterations in human tetanus and those found in experimental tetanus are the same. The introduction of tetanus toxin causes changes in the motor cells, but these changes are not found only in tetanus, but in other diseases. He preferred injections of the antitoxin beneath the dural instead of beneath the arachnoid, as he considered this an impossibility without injuring the spinal cord. In injecting into the tissue of the spinal cord it must be remembered that there is great danger of starting an acute myelitis.

DR. PERKINS stated that recently he had injured his hand and was compelled to ride a horse for the entire day. He was unable to cauterize it, but he had applied tetanus antitoxin locally. In such close proximity to the horse, where the tetanus bacillus is abundant, he wondered whether the local application of the antitoxin had had any influence in preventing the appearance of tetanus.

DR. LEBEUF reported a case of a child in whom he had injected ten c.c. of antitoxin, and in which bromid and chloral were administered, with a recovery from the tetanus.



DR. JACOBY reported a case of tetanus in which 100 c.c. of antitoxin were injected into the vein, with one pint of physiological salt solution, which had terminated fatally.

DR. MATAS stated that the hospital statistics read by Dr. Gessner at the close of his interesting report were quite sufficient to prove that the problem of tetanus remained as grave as ever. He still believed in spite of all he has done for the cure of tetanus that the prognosis of the disease depended largely upon the period of incubation. With Yandell he believed that "recoveries from traumatic tetanus have been usual in cases in which the disease occurs subsequent to nine days after the injury. When the symptoms last fourteen days recovery is the rule, apparently regardless of the treatment followed. The time test of a remedy is its influence in the history of the disease. Does it cure cases in which the disease has set in previous to the ninth day? Does it fail in cases where the duration exceeds fourteen days? No agent tried by these tests has yet established its claim as a true remedy for tetanus."

He firmly believed in the value of antitoxin injected prophylactically, and had little confidence in its utility when administered after the disease manifested itself, though he still administered it in this way as a routine treatment in this disease. He had hoped much from the intraneural injections of antitoxin, especially after the very interesting and brilliant results reported by Dr. Gessner; but unfortunately an experiment referred to by Wasserman, in a lecture delivered in New York, on his visit to this country, would throw great doubt on the value of the intraneural method. He says (*New York Medical Journal and Philadelphia Medical Journal*, Oct. 15, 1904.): "The tetanus antitoxin, unlike the toxin, is not a neurotropic substance, but follows the blood and lymph channels. The following ingenious experiment appears to confirm this: Tetanus toxin and antitoxin were mixed in such proportion that the mixture was innocuous on injection into the hind paw of a guinea pig. When, however, adrenalin was injected into the hind paw of a guinea pig of the same size, and after sufficient time had elapsed for contraction of the capillaries the same mixture was injected into the animal typical tetanus developed. The explanation lies in the fact that the channel of absorption for the antitoxin had been blocked, while the path for the toxin, i.e., the nerve, was open. The toxin, therefore, tore loose

from its combination with the antitoxin and ascended the motor nerves to the cord. This experiment of Wasserman would seem to invalidate the direct intraneural injection of antitoxin, administered in the belief of securing absorption along the same channel with the toxin."

DR. GESSNER, in closing the discussion, stated that he agreed with Dr. Matas that the prophylaxis of the disease was far more important than anything else. Regarding the Bacelli treatment he had seen it tried several times in the Charity Hospital and Dr. Ed. Newell had reported some cases treated with it. However, he had never seen any good effect from its employment.

DR. HALSEY, speaking again, stated that the only thing to be expected from the antitoxin was to block the toxin and that it was impossible for the antitoxin to overtake the toxin. This made manifest the importance of injecting antitoxin early. In order for a mixture of tetanus toxin and antitoxin to be effectual they must remain in contact for some time. He considered the intravenous method a rational procedure. All one can hope from the use of antitoxin by any method is a *lessening* of mortality. Antitoxin, as far as we know, cannot neutralize toxin which has already reached the cord.

#### PRESENTATION OF CASES.

DR. FEINGOLD exhibited *a case of ptosis of the right lid, with the right eye in extreme abduction*. The left eye presented free movement, but the right eye could not be moved beyond the middle line inward, nor could it be moved up and down. This was explained by the doctor on the assumption of paralysis of the superior levator muscle of the rectus internus, the rectus superior, the rectus inferior, and also of the obliquus inferior. The pupil of the right eye was more dilated than that of the left, showing a paralysis of the sphinctor papillae. These symptoms pointed to a paralysis of the oculo-motor, or third cranial nerve. Vision on the affected side was perfect and the fundus was normal. The abducens, or sixth cranial nerve is frequently paralyzed, but the doctor stated it was rare to find all the branches of the third cranial nerve affected. In this case the nerve was evidently severed after its exit from the brain. The history of the case showed the injury to have been traumatic.

## DISCUSSION.

DR. VAN WART said that he had examined the case twice for Dr. Feingold, and that there were no signs of any nerve except the third having been injured.

DR. HALSEY had seen the patient in his ward at the Hospital immediately after he had received the injury, and, considering it a surgical case, had not examined him carefully, but had him transferred to a surgical ward. He remembers the right eye was ecchymotic and there was ptosis present at the time. The diagnosis of fracture of the base was made at that time.

## MEETING OF FEBRUARY 25, 1905.

DR. OTTO LERCH read a paper entitled:

**“Diseases of the Heart and Their Treatment; a Synopsis.”**

Life of the human organism depends largely upon the equilibrium existing between arterial and venous pressure; if this is perfect, nutrition is perfect and all waste is readily removed. If arterial pressure falls venous pressure rises, and, if persistent, will finally result in the dissolution of the organism.

Etiology and pathology of the diseases of the heart and circulation teaches us that as soon as this equilibrium is disturbed we have a complex of symptoms at once characteristic and remaining the same no matter what the primary cause may have been. The direct and final cause is always the same, a weakening of the heart muscle, a breaking down of the heart, due, it may be, to a valvular lesion or an obstruction in the pulmonary or systemic circulation. A trouble once established, the heart answers immediately with greater work and consequent hypertrophy, the demand to compensate. As soon as the heart ceases to compensate for the damage, venous pressure rises and arterial pressure falls. The pulmonary system becomes congested and the engorged systemic veins are unable to pour their contents into the right heart. A continuation of this process tears the alveoli and allows serum to pass, causing emphysema and edema of the lungs. The engorgement of the systemic veins causes at the same time an intense hyperemia of all the abdominal organs, the stomach, liver, spleen and kidneys; edema of feet and ankles follow, places where, in health, the circulation is weak and where, under these altered



conditions, the masses of blood contained in the engorged large veins press heavily upon the capillaries, serum passes into the tissues, and the lymph vessels, unable to empty into the overfilled venous system, cease to drain. Symptoms: The expression of pathologic conditions that threaten life appear, sooner or later, after a valvular lesion has been established or an obstruction in the pulmonary or systemic circulation has become permanent. The heart answers the demand for more work with hypertrophy, and as this can be carried on only to a certain point, a time will come when a slight exertion may cause the compensation to break. Shortness of breath and palpitation are generally first noticed, the blood is poorly aerated in the congested and charged capillaries of the lungs. The alveoli are torn by the engorged vessels and damaged and encroached upon by intensified tissue growth. The face becomes cyanotic and blueness of lips and finger tips marked. The pulse, formerly feeble, becomes irregular and palpitations more frequent, due to frantic efforts of the heart to empty its chambers. Perspiration is increased, and in contradistinction to the suddenly developed overaction of the skin, the urine is diminished in quantity, is of high specific gravity, highly colored, and contains a sediment and albumin, the typical urine of stain.

A bronchitis accompanies the changes that take place in the lung parenchyma, the intense passive hyperemia causes catarrhal inflammation and the patients are shaken with violent coughing spells, nature's efforts to rid the bronchi of a profuse serous, slimy and frequently bloody secretion.

The conditions existing in the lungs, "torn and changed alveoli, congested venous capillaries and clogged up bronchi," against which the diseased and weakened heart batters, give rise to the distressing spells of dyspnea, so well known to every practitioner under the name of cardiac asthma. Every organ in the body suffers in proportion, chronic gastritis, constipation, diarrhea and congestion of liver, all due to the obstructed return of blood coming from these organs into the vena cava. The enlarged liver and spleen and the distended stomach, even after a light meal, pressing from below against the diaphragm, are additional causes to increase the dyspnea, bile is changed in composition and reabsorbed by the blood, giving an icteric hue to the skin.

The congestion of the kidneys causes pains in the lumbar region



and the characteristic urine (Reduction of quantity, high color, high specific gravity, a sediment, albumin and sometimes casts). Further progress of these disturbances leads to the exitus—directly due to heart failure or secondary nephritis and general anasarca and hydrothorax, hydropericardium and cerebral edema are the usual causes of death in the latter instance; whereas, in the former, fatty degeneration of the heart muscle causes it, though a sudden dilatation of the heart, due to its inability to force the constantly growing mass of venous blood into the pulmonary circulation, may occasionally cause a healthy heart muscle to fail.

Though the direct cause of this serious complex symptom is always the weakening of the heart muscle, it is well in the study of these diseases to consider separately the idiopathic forms and valvular lesions.

In the former we find increase or decrease of muscular substance, with dilatation the dominating change and an obstruction somewhere in the circulation, a plethora malnutrition, and toxic substances in the blood its cause.

Hypertrophy of the left ventricle, with subsequent dilatation, is found due to greater work in arterio-sclerosis, aneurism, tumors pressing upon the arteries, etc., and a partial destruction of the capillary system of the kidneys, as in chronic and interstitial nephritis.

Hypertrophy of the right ventricle, with following dilatation, is found when the obstruction exists in the pulmonary circulation—deformities of the chest, emphysema, thickened pleura, interstitial pneumonia. In plethora the heart has to move a larger amount of blood through the system, which, with the greater friction that exists in the vessels, causes its hypertrophy and final dilatation. Atrophy and weakening of the muscle without a previous hypertrophy, are due to alcoholism, nicotin, the toxins of the various infectious diseases producing a myocarditis and lack of nutrition in anemia chlorosis, old age and in all chronic diseases.

The heart of the obese, the “fatty heart,” is weakened by layers of fat deposited upon it and between its muscular tissue. The heart is surrounded by a mass of fat, deposits of it having grown deep between its muscular fibers and have changed it into a flabby, dilated bag, without form or force. We find the muscular fiber only degenerated in the most advanced cases, which is, however, the end in all cases of heart disease.

If the fatty heart is accompanied by degeneration of the arteries, especially of the coronaries, the prognosis is always very grave.

Dilatation is due to the rise of intracordial pressure, combined with loss of tonicity of the muscle, which the heart force is unable to overcome, and hypertrophy follows in consequence of dilatation upon demand for greater work, causing an increased flow of arterial blood through the coronaries.

Hypertrophy may take place without a previous dilatation; muscular growth depends here, as elsewhere in the body, upon improved nutrition. Whenever hypertrophy is detected, it is compensatory to make up for a deficiency or to overcome some obstruction and it is, of course, necessary to preserve it and to re-establish it when lost.

Dilatation is a symptom of heart weakness and may also occur in valvular lesions before compensation is fully established or in myocarditis or sclerosis of the coronary arteries. Sclerosis of the coronary arteries may be advanced and yet the heart may be found unchanged, as long as their lumen is sufficient to pass blood in sufficient quantity for its proper nutrition.

Endarteritis of these arteries, as well as endocarditis and pericarditis, may be the cause of interstitial tissue growth and consequent aneurism—thrombosis and hemorrhagic infarct, that of myomalacia, the most frequent causes of heart rupture, often diagnosed as apoplexy.

Valvular lesions are always due to an endocarditis, the inflammatory process causing a growing together of the valves, creating an obstruction or their shrinkage an insufficiency, articular rheumatism and all the infectious diseases, especially pneumonia, as well as arterio sclerosis, may cause it. As soon as the lesion is once established the heart answers the demand to compensate with greater work, which causes hypertrophy and final dilatation. In aortic lesions the left ventricle is especially affected and in mitral diseases the right ventricle.

In aortic insufficiency the hypertrophy is marked by a heaving apex beat, which is downward and to the left displaced, and increased area of heart dullness to the left a diastolic murmur over the aorta, pulsating carotids, Corrigan pulse and sometimes capillary pulsation.

A stenosis of this valve gives a weak apex beat similarly dis-

placed, as in the foregoing case, an increase of heart dullness to the left, systolic murmur sometimes and fre-eminent cataire over aorta, and a pulse small and slow.

The symptoms are entirely different in mitral lesions. The apex is displaced to the left and its force but little changed, heart dullness increased to the right of the sternum, systolic murmur at apex accentuated, pulmonary sound, and in advanced cases, congestion of the liver and venous pulsation.

In mitral stenosis, a moderate apex beat, area of heart dullness increased to the right,, pulsation of right ventricle in the epigastrium, presystolic murmur at apex, sometimes fre-eminent cataire, clicking second pulmonary sound and weak and slow pulse.

It is clear that in aortic disease the left ventricle should be hypertrophied, as it is directly called upon to compensate for the lesion, and in mitral disease the right ventricle, as this has to force the blood onward which collects in the left auricle, causing a congestion of the pulmonary circulation. Tricuspid lesions are rare, and pulmonary disease is almost only congenital and is always easily recognized by the intense cyanosis it causes.

Aortic insufficiency gives increased systolic pressure, a shortened diastole and collapse of arteries, due to regurgitation.

Aortic stenosis—a prolonged, strong systole and shortened diastole, which accounts for the peculiar pulse.

Only a few pathologic conditions of the circulatory systems need further consideration. We have to remember that the blood is the oxygen carrier and that it removes waste matter. A great mass, due to over-nutrition, causes hypertrophy of the heart and vessel walls, and final dilatation.

A symptomatology corresponding to this condition, a high-tension pulse, hyperemia of skin and mucous membranes, a tendency to congestions and hemorrhages.

In hydremia we find an increased volume of blood, with decrease of solids, a condition favored especially by the kidney and heart disease, both interfering with the proper elimination of water, increased ingestion of liquids, beer or water, will cause dilatation, with consequent hypertrophy of heart and vessels, and may give rise to the so-called Ox-heart.

If the habit is coupled with heart or kidney trouble, the condi-

tion is the more serious, as the normal elimination of water is interfered with.

A sudden stretching of the heart muscle and dilatation of the heart is possible and does occur, following an extreme muscular effort, quite a number of such cases having been recorded.

In order to treat we must know the cause of the disease and determine the changes that have been produced in the various organs and tissues. As in every disease, only a correct diagnosis will enable us to benefit our patient. Though the immediate cause is the breaking down of the heart and the symptomatology is the same in all these diseases and therefore the treatment has to be similar, the proper dose and method can only be determined after the exact pathological condition has been recognized.

If the compensation is broken, it has to be our aim to re-establish it, if it is still intact, to preserve it. We have to strengthen the heart muscle, cause compensatory hypertrophy and reduce an existing dilatation. Thereby we will establish an equilibrium between the venous and arterial circulation, necessary to health and life. To accomplish this object we have to reduce the fluids of the body, relieve the pulmonary and kidney circulation and improve the blood.

In a very large number of cases, the mechanic-dietetic treatment is alone indicated; in others a drug treatment has to be combined with it and in others again we have to commence with absolute rest and use it jointly with one or both of the other methods.

We can burn up body fat or enrich the organism in fat and albumin, or in both, and exercise a direct influence upon heart and muscle, with massage, gymnastics, walking and climbing and hydrotherapeutic measures.

If the blood is diluted, we can condense it and if of too great a density, we can dilute it. Lessened excretion by kidneys, skin and lungs, dilutes the blood and exudation of serum into the tissues and body cavities condenses it.

The obese, the sufferers of fat-heart take as a rule large quantities of water and it is in this class of patients that the blood is often found hydremic.

In chronic myocarditis and valvular disease of long duration, the blood is often found of great density, another important factor to demand greater work from the heart.



Ingestion of food increases blood pressure and the effect is greatest when solids are taken together. The heavier the meal the heavier the pressure, which will be further enhanced by an addition of stimulating drinks, such as coffee, tea and all alcoholic beverages.

Pressure and specific gravity of the blood varies with quantity and quality of the food ingested. Increased ingestion of liquids raises pressure and decreases density.

Elimination of water takes place by way of the kidneys, lungs and skin and increased elimination by one of these channels decreases exertion by the others, necessarily.

In studying circulatory disturbances it is always necessary to ascertain the activity of the kidneys. Some patients excrete more urine when the amount of the liquids ingested is reduced; and the large majority of patients excrete less with reduction of liquids taken in. Those patients suffering from fat-heart frequently expel a larger amount of urine, with reduced ingestion of fluids. The heart recovers strength with eased work and the kidneys show greater activity.

In valvular disease, with kidney intact, we find, as a rule, ingestion and excretion of fluids in proportion and in valvular diseases, with myocarditis and nephritis the amount of urine is reduced. The excretion by lungs and skin depends on frequency and depth of respiration and on climatic conditions. Dryness and high temperature of air increases its activity to take up moisture. Exercise, especially walking and climbing, causes excretion by way of lungs and skin and the hot air bath and steam bath allow a rapid removal of water from the body if the ingestion of liquids is limited.

The organism will stand higher temperature in the hot air bath, as the evaporation of the continuous perspiration will cool the body surface and the dry air will rapidly absorb moisture. Heart strength has to guide the therapist to select the suitable method.

Patients with a completely broken compensation need rest and drug treatment, to which one or the other of the above treatment must serve as adjuvant.

To regulate the diet for each particular case we must not lose sight of the end to be accomplished "to re-establish or keep the compensation and to strengthen the heart muscle."

If obesity has left the heart and circulation intact, a change of

diet, reduction of liquids and exercise will restore the patient to health. Banting advised his patients to live upon a nitrogenous diet, without reduction of liquids. This method had to be abandoned on account of loss of strength, digestive disturbances and loss of sleep, which frequently forced the patients to interrupt the treatment. To be successful, it predisposes normal blood, normal heart and normal circulation. The organism will keep its nitrogenous equilibrium only if as much albuminous food is ingested as can be digested and absorbed by healthy intestines. Fat acts differently. It is stowed away in the body if ingested in greater quantity, though we find a slight excess of expenditure with increased ingestion. A small quantity of fat and carbohydrates will preserve the nitrogen of the organism and save body fat. To treat the obese with a hydremic condition of the blood, we have to reduce venous congestion, which causes more or less severe disturbances—headache, indigestion, shortness of breath after light exercise, etc.—we have to limit fluid ingestion to deplete the engorged venous system, reduce fat and carbohydrates, direct exercise, which will strengthen the weakened heart muscle and use the carbohydrates and fats allowed in the diet. An overloading of the stomach has to be avoided and solids and liquids are best separately given. A distended stomach presses against the diaphragm and blood pressure rises after a full meal. However, it is wise to proceed slowly and the individuality of each patient has to be considered. It is a fact also that a reduction of liquids will reduce body fat.

Patients with normal fat or a waste of fat and muscle and a heart threatening to break down, due to valvular disease, obstruction in the pulmonary or systemic circulations, require regulation of diet, with increase of albumin and decrease of liquids in the diet.

It is also necessary to protect patients whose fat and muscles are wasted from further loss of albumin, by making body fat. The changed mucous membrane of the intestines due to venous engorgement, interfere with fat absorption, and a diet rich in proteids and carbohydrates is therefore indicated in these cases.

Carbohydrates, when given in excess, are converted into body fat.

A proper diet alone is not sufficient to increase nutrition; func-

tional activity is necessary to make muscle. A compensation lost can be re-established, the disturbed venous and arterial circulation equalized by causing a more rapid flow of the blood through the veins and a beneficial influence can be exercised upon damaged vessel walls.

Horizontal position of the extremities will ease the return flow. In health little heart force is left to push the blood through the veins, and if the heart is damaged, this is still further reduced. Gravity facilitates the flow in the descending veins and counteracts the same in the ascending veins. It is thus readily understood why and how position will influence the circulation.

The soft but firm stroke of massage directed from periphery to center, will empty the superficial veins and lymphatics and facilitate the flow of blood in the arteries.

The deep kneading, imitating the heart's contraction, will do the same for the deeper vessels and the rapid beating of muscles, combined with passive and active movements, causing muscular contraction, will have a similar effect, to push the venous blood into the right heart. Tapottement between the shoulder blades and vibrations along the spine will frequently slow the pulse—the digitalis of the masseur.

Walking and climbing acts especially upon the large veins. Deep inspirations cause suction and the use of a stick contraction of muscle. Climbing forces deep inspiration. Arterial pressure rises, due to a more rapid flow of venous blood into the arteries, which lose their tone, the full and soft pulse indicates the equilibrium of the circulation and the thermometer shows greater heat loss. The increased blood pressure is compensated by widening of the vessels and by loss of tone.

Increased heart force, lessened peripheral resistance, greater blood flow, are conditions to produce increased nutrition. The loss of water by way of lungs and skin moderates the increased blood pressure.

The dilated and softened arteries, the deeper respiration and the stronger heart contractions are conditions which last for hours, insuring for that time increased metabolism and improved nutrition—a permanent gain.

Whatever the condition we are called upon to treat may be due to—idiopathic disease of the heart or valvular disease—the aim of



our treatment must be to "relieve the insufficiency and to increase the heart-strength." If the mechanical treatment fails to cause stronger heart conditions, then this treatment is useless and we have to have recourse to rest and drug treatment.

However, in the vast majority of cases, if the disease is not too far advanced, we can increase the muscular fibers of the fat heart, counteract atrophic conditions due to anemia and chlorosis, compensate disturbances due to valvular disease, influence beneficially myocarditis and pericarditis and improve sclerosis of the coronaries. Nature herself does all this in many instances, but it is the office of the physician to employ her means systematically in the treatment of diseases.

Muscular movements stimulate the heart. They are a demand for more arterial blood and in consequence a greater amount of venous blood is returned to the heart. Walking and climbing is superior to all other exercises. It is the best method to strengthen the heart. Its contractions become stronger. The arteries dilate, improved nutrition cause muscular hypertrophy and its dilated chambers return to their normal size, or to as much as the pathological condition will permit. Body temperature is increased, fat burned up from all its deposits and the muscular exercise does not favor the forming of new deposits.

Gymnastics, with or without apparatus, massage, Swedish movements, passive and active movements with and without resistance and outdoor work, are all therapeutic means to be used with the same object in view. To dilate the capillaries, to remove peripheral resistance, to cause a better filling of the arteries, to deplete the veins, to cause stronger heart-contractions and an improved nutrition of muscles. Prolonged rest and milk diet are injurious in heart disease.

The massage of the heart, as designed by Oertel, is useful. The patient is directed to take a deep inspiration, which causes a negative pressure within the chest, and to divide the expiration in two portions, exercising pressure upon the heart, of which the second is especially strong. The effect can be further enhanced by manual pressure upon the chest walls. The physician applies both hands in the axillary lines, about on a level with the fifth rib, upon the chest wall and in a semi-circle, with the beginning of the respiration allows them to glide downwards toward the ensiform



cartilage, increasing gently but firmly the continuous pressure. As soon as the hands reach the middle line pressure is made with the thumbs, moving them outward to the right and left, preventing an outward movement of the frontal thoracic walls. At the end of the inspiration, the hands are again applied firmly and the process is repeated. This direct massage of the heart removes a larger amount of air from the lungs than during ordinary or simple deep breathing, adding the advantages of massage to the heart muscle.

The systole is prolonged and strengthened, the diastole shortened, a larger blood wave passes through the arterial system and heart-labor is eased. The coronary arteries share the benefits and a more perfect nutrition of the heart muscle is obtained. With it, especially with interrupted breathing, massage is applied to the vessel walls, increasing their elasticity. Continued pressure damages it to such an extent that they will finally allow serum to pass into the tissues.

A proper dose can be most readily given to each particular case, as these various mechanical applications can be modified and the mildest form can be gradually increased to the most severe form. Walking and climbing is to be preferred under given conditions, as it allows continuation for any desired length of time, fresh air, diversion and the effect of sun heat upon the sweat glands, lessening blood pressure by removing moisture from the organism. Frequent and thorough examinations have to be made during a course of treatment to study the effect of the treatment and modify it as the progress may demand.

The application of hydrotherapeutic measures needs consideration.

The heart can be directly influenced by cold and hot applications and clinical experience has shown that after suitable hydropathic measures, dilated hearts decrease in size and show improved functioning. Cold applications slow the pulse and hot applications increase its frequency. A cold bath increases blood pressure and a warm bath diminishes it. The heart answers promptly the demand for greater work and the hyperemia of the skin following the cold bath means improved circulation. During a cold application the capillaries contract and the blood is driven into the interior arteries and the work of both ventricles is increased. The reaction that

follows the application dilates the capillaries and the blood rushes into these vessels; the skin shows a healthy glow and an agreeable sensation of warmth is felt. The work of the heart is eased, but the stimulus it has received is lasting and the improved nutrition is a permanent gain.

It can be seen, however, that this powerful method has to be used with caution, as immediately following the application the heart is taxed and has to call up its reserve force to overcome the obstruction.

The patients who have lost force to a large extent, and those who react poorly, those affected with advanced nephritis and the sufferers from arterio-sclerosis, this form of bath is contraindicated. After a cold application it is absolutely necessary to follow the same with vigorous friction and never stop till a good reaction has been produced. By proceeding slowly and cautiously and by administering a warm bath before making the cold application, we can lessen the taxing effect upon the heart to a large extent. The ice bag and local applications we can frequently use when it would be dangerous to use the cold bath or douche.

The warm bath, the steam bath and the hot air bath cause dilatation of the peripheral vessels. The pulse tension and blood pressure fall and the number of heart contractions increases. A large blood stream is directed toward the periphery, relieving the congestion of all internal organs. The peripheral resistance is decreased and the heart work lessened.

The increase of pulse frequency is due to reflex action of the sensory nerves of the skin. The volume of the extremities remains increased and that of the waist measure decreased for several hours after the bath, due to the large amount of blood and lymph drawn from the organ into the peripheral vessels. A caution is here, however, also necessary—weakened hearts, with advanced dilatation, will not stand vigorous measures.

The effect of the hot water bath, steam and hot air bath for the purpose of removing rapidly a large quantity of water from the body, if ingestion of liquids is limited, has been mentioned.

We can increase the action of water upon the sensory nerves by adding irritating substances and a number of mineral springs containing sodium chloride, calcium chloride and iron salts have become famous in the treatment of the diseases of the heart.

The waters at Nauheim, containing carbonic acid, were employed with advantage in the treatment of articular rheumatism, with endocarditis, in 1872, by Beneke and others followed, but their general application in heart disease and their present popularity, they owe largely to the labors of Drs. Schott brothers, of that place. So much so, that by the laity they are frequently regarded as a specific

We have no specific for heart disease. Like in the mineral bath, the thermic and mechanical effect is increased by the irritating influence of the carbon dioxide they contain, and the constantly forming and escaping gas bubbles cause a continuous change of dilatation and contraction of the peripheral capillaries, which means a massage to vessel walls and functional activity to the heart. The bath usually lessens blood pressure and increases pulse frequency.

The bath may be given at home. Compressed carbon dioxide can only be used with expensive apparatus. In private practice the gas is best developed in the tub about one part by weight of sodium bicarbonate to one and a half parts of commercial hydrochloric acid, which allows an excess of the acid. If equal part are taken, as is often the case, alkali is in excess.

One kilogram of bicarbonate of soda and half a kilogram of commercial hydrochloric acid to 250 lbs. of water corresponds to a strong Nauheim bath.

It is wise, however, to commence slowly, perhaps with one-tenth, and to increase with the progress made.

To prepare the bath the salt is dissolved in the water and the acid contained in a long necked bottle, allowed slowly to escape by moving the same, neck downward, under the water, avoiding too great motion of the water.

If it is desirable to make the artificial bath similar to those of Nauheim, the Nauheim salt containing sodium and calcium chloride may be added before developing carbon dioxide.

The temperature at the beginning of the treatment is best body heat and gradually cooled down with each succeeding bath, duration to increase from 7 to 30 minutes. A further advantage of this form of bath is the agreeable sensation of warmth due to the rapid and continuous dilatation and contraction of peripheral capillaries and according to Goldsheider, to the specific effect of the acid upon



the heat points of the skin. The bath tub may be covered to prevent the escaping carbon dioxide from vitiating the air.

A larger volume of urine is voided after each bath, warm or cold, a symptom of re-establishment of heat compensation and an improved circulation.

All diseases of the heart and circulation may be advantageously treated with these methods, except when complicated with nephritis in the advanced state and sclerosis of the coronary arteries in old patients with advanced degeneration of heart trouble.

Steam baths can only be used when the respiratory apparatus is intact. Liquids ought not to be reduced when the urine contains a large quantity of urates and uric acid, unless a larger quantity is voided after such a reduction. Fatigue is always to be avoided. We want to strengthen and make muscle, not to overtax what is left. Prolonged and absolute rest is injurious in all cases, even in advanced atheroma and sclerosis of the arteries, aneurism of the aorta and advanced Bright's disease.

A slow progress with frequent examinations is necessary in all cases if the treatment is successful.

A dilated heart beats stronger and contracts, the pulse becomes regular and full, respiration normal, and cyanosis disappears, exertions cease to cause dyspnea, catarrhs are cured and the kidneys resume their proper function. To keep the advantage gained the life of the patient has to be modified and the treatment resumed whenever the compensation threatens to break.

In cases of completely broken compensation we will succeed with a number of patients by placing them in a horizontal position, regulating the diet, especially by reducing the liquid ingested. If this fails we have to apply drugs, remembering well, that the action of heart stimulants may be compared to the whip applied to a tired horse.

The object of the treatment remains the same "to re-establish the compensation." The means by which to accomplish this remains unchanged. We have to ease the work of the heart by diminishing peripheral resistance, relieving congestions and strengthening ventricular contraction.

The most efficient drugs to dilate the arteries are nitro-glycerin and the nitrites. The iodides which were given for the same purpose have been shown to increase the viscosity of the blood and



are useful on that account in atheromatous conditions of the arteries, decreasing friction, allowing increased flow through narrowed vessels and causing better nutrition.

If not given for syphilitic endarteritis, small doses will accomplish as much as large doses.

To remove fluids from the body, pilocarpin has no superior; however, it has to be employed with great caution, though, according to Lyden it does not weaken heart contraction. Its overaction may cause nausea, vomiting and collapse and a profuse secretion into the bronchi is dangerous, unless the lungs are intact. Laxatives, cathartics and diuretics will lessen edema, deplete the veins and reduce congestion. Calomel acts, as is so well known, especially on the liver. If employed as a diuretic it is a superior drug, though without due caution a severe stomatitis may be caused by its administration. As it is the object to draw fluid from the body by this means, the salines act best, though for immediate effect jalap and elaterin may occasionally be used with advantage. During the treatment it must be borne in mind that the object is to relieve congestions and to ease heart work, as soon as this is accomplished, the heart in many instances will recover and a better distribution of the fluids will be the consequence. A further purgation at this stage would do harm.

To stimulate a weakened heart to stronger contractions, we possess a number of drugs, whose therapeutic and physiologic action is well understood, and which, more or less, all have a specific effect. It is not the object of this paper to discuss their merit; a mere mention will be sufficient. Alcohol, in some form, ether, caffein and camphor, for immediate effect; digitalis, strophanthus, cactus glandifloris and others, for more permanent use, and strychnin for its action upon the nerve apparatus. In the administration of digitalis we have to consider its contraction of the muscular coat of the arteries, and as it is the object of the treatment to strengthen ventricular contraction, to diminish peripheral resistance and increase blood flow, this drug is contra-indicated in heart disease, complicated with interstitial and chronic nephritis and in general arterio-sclerosis, unless a vaso-dilator, nitroglycerin by preference, is given at the same time.

If with this method we have accomplished our object and have re-established the compensation, then again we have to have recourse

to the mechanical dietetic treatment, and if improvement does not continue under its employment, the heart commences to beat weaker, the pulse becomes thready, cyanosis and dyspnea return, then our work has been only a patching up, the prognosis is grave and the end is near.

To the labors of Oertel, the originator of the mechanical-dietetic treatment, of Winternitz, the father of hydrotherapy, and of Schott and others, who have made the treatment of cardiac diseases with the carbon dioxide bath popular, I am largely indebted for the facts presented in this paper.

#### DISCUSSION.

DR. PATTON, in opening the discussion, said that after listening to such a paper as that of Dr. Lerch, covering the subject so thoroughly, he felt that it was not necessary to apologize to the Society for refraining from any attempt to discuss it in detail. The advantage derived from listening to scientific papers is twofold; some are a source of knowledge regarding the results of original work, while others serve to stimulate thought on subjects with which the hearers are supposed to be already acquainted. The paper of Dr. Lerch is remarkable not only for its precision and completeness, but especially as setting forth the most approved methods of treating cardiac trouble by dietetic, mechanical and hydrotherapeutic methods as practiced with such success in Germany, the land where such measures have been brought to greater perfection perhaps than anywhere else in the world. Dr. Lerch's paper was all the more interesting because its author has had opportunities year after year to study those methods in Germany. It is unfortunately true that the tendency of general practice is to regard organic heart troubles as hopeless, so that many physicians attempt no more than what the paper has aptly characterized as "patchwork." This is all the more to be regretted because, as emphasized by Dr. Lerch, so much can be done by the methods he mentions in the way of checking the progress of heart disease and rendering the lives of sufferers more tolerable. The thanks of the Society are due for such a paper, which will be the more appreciated when it shall appear in print.

DR. EUSTIS was very much interested in the paper and thought

that the doctor had brought out many points which deserved serious consideration. However, he did not think that Dr. Lerch had laid sufficient stress upon an exclusive milk diet in these cases. When we consider that the kidneys can take care of eighty grams of proteid matter per day without a strain upon the organ, we must guard against giving too much milk. Cows' milk contains 4 per cent. of proteids and in giving a patient a gallon of milk a day, which is so often done, 160 grams of proteid matter are ingested, twice as much as should be. Furthermore, the large amount of water taken in this form, produces a hydremia, which was cautioned against by Dr. Lerch.

DR. WEIS stated that Dr. Lerch had omitted one of the most important signs in the diagnosis of aortic stenosis, i. e., the presence of a palpable thrill over the pericardium, and he did not consider that a diagnosis of aortic stenosis could be made in the absence of this sign.

DR. PERRILLIAT read a paper entitled:

**"Extra Uterine Pregnancy; Operation Before Rupture."**

Of more importance, in ectopic pregnancy, is it to make an early diagnosis than in any other morbid condition that may affect the pelvic organs of the woman, and the more experience one has with such a condition, the greater will be brought out the emphasis that should be laid on certain symptoms, but more particularly on the attitude of the attending physician, when dealing with such cases. In the individual case which I am about to report, I am quite confident that I would have overlooked the presence of tubal pregnancy, and would have been called in a few days to treat a case of ruptured tube, had I not borne in mind constantly the axiom, that, the physician should "look on, and look out" for it at all times. And it is that which I want to bring out at first before I go on to the more minute consideration of the symptoms presented by the patient. The dilatory policy that some affect to assume is deplorable, but even more is the lack of an accurate and detailed history which is too often the routine in the busy practitioner's life, and without which any knowledge of departure from the normal remains clouded in doubt, and the patient, impelled by false modesty, will quickly preceive this and possibly



refuse an examination, when such is imperative. In this way a delayed menstrual period may go unheeded, and the supposed return of the menstrual flow proves to be only the advance guard of irregular hemorrhages, and the danger signal of an impending rupture. When, therefore, in answer to questions from my friends as to what made me suspect that there was ever any tubal pregnancy, my answer is that I always suspect it. My mental analysis is like that of the French Code, which believes the prisoner guilty until proven innocent. Now as to the symptoms presented by the patient, the subject of Extra-Uterine Pregnancy may be considered before or after rupture. The physical signs of rupture are dwelt upon at length in the texts and are those of an internal rupture and hemorrhages. Rapidly enumerated they consist of sudden and acute abdominal pain, loss of consciousness, a feeling of faintness, vomiting. On examination we have, besides the sign of a concealed hemorrhage, such as increasing pallor of the surface, rapid and compressible pulse, and finally gradual collapse and death if left untreated. It is essentially a condition in which the tendency is not to recovery but to death, and to very speedy death, for the majority of cases end fatally within forty-eight hours, and sometimes only a few hours.

The vaginal examination will be only vaguely satisfactory in such cases, giving only a sense of bagginess in the Douglas cul-de-sac, owing to the presence of semi-clotted blood in the pelvis. Webster, in his monograph, places very great reliance on the acute abdominal tenderness which is elicited on palpation. Such is a briefly sketched picture of a tubal pregnancy in which rupture has taken place. Can we diagnose such cases before rupture? And if so, upon what signs shall we do it.

In a previous report by myself of a case of intra-ligamentary pregnancy I quoted Dr. Cousins, *British Medical Journal*, 1904, on the relative proportion of ectopic to normal pregnancies, in which he mentions the great difficulty in making an early diagnosis on account of the lack of precision of our methods, and calls our attention to the fact that in the absence of well marked signs and symptoms of pregnancy, it is certainly not surprising that early tubal gestation should sometimes be destroyed, and the patient speedily recover without any recognition of her real condition. "But," he goes on to say, "a diagnosis sufficiently early can be made



and an operation performed before the life of the patient has been seriously imperilled in most cases." A history of suppressed or delayed menstruation, associated with fitful and irregular hemorrhages, obscure pelvic pains with the presence of a swelling adjacent to or continuous with the uterus, together with some of the subjective or objective probable signs of pregnancy, such as enlargement of the breasts, and morning sickness, are sufficient evidence of the existence of an unruptured tubal pregnancy to justify an abdominal exploration. I have purposely omitted the expulsion of the decidual cast from the uterus, for while it is a pathognomonic symptom when obtained, its appearance comes usually after rupture has taken place, or a tubal hemorrhage causing the death of the ovaries and imitating uterine contraction.

These are the symptoms which enable me to make a diagnosis in the case which I will now report.

Mrs. K., age 22, born La., married four years. One child two years old. Labor normal. No miscarriage.

*Menstrual History.*—Began at 14, but had no trouble until after marriage, when she began to suffer with painful menstruation.

*Previous History.*—When child was six months old she began to suffer with right ovary; also a yellowish discharge from the vagina. Was confined to bed one month, presumably with pelvic-peritonitis. Since then she remains well for four or five months, and then has a return of the attack.

*History of Present Condition.*—She came to me in the latter part of July with a double salpingo-oophoritis. On August 16 she should have had her menses, but they did not appear. On the 17th I saw her, at which time she was suffering with rather severe pain in the right iliac region, and appeared to be depressed out of proportion to the severity of the pain. On the 18th the menses appeared. I did not examine her. On the 22nd I saw her again and made an examination, and found a mass to the right side of the uterus, baggy to the touch, but still well outlined. I suspected extra-uterine pregnancy. She was kept under observation one week, and the mass was observed to grow. On Tuesday, the 30th of August I gave her chloroform and introducing an operating needle through the vagina, and withdrew a few drops of a dark brown fluid. There was slight enlargement and pain of the breasts. The diagnosis of tubal pregnancy was made positively on the fol-

lowing day. August 31, the tube was removed, together with a large clot inside of it, and in the center of this clot the ovum, which had become detached. The removal of the tube was not accomplished without difficulty for the pre-existing salpingo-ovaritis had left adhesions between the tube and the bowels and bladder. The patient made a complete recovery.

#### DISCUSSION.

DR. CHAVIGNY, stated that Dr. Perrilliat pointed out a most important feature of cases of extra-uterine pregnancy, i.e., diagnosis before rupture. He reported a case seen in the hospital in the service of Dr. E. S. Lewis, in which the extra-uterine pregnancy had passed seven months of fetal life before the diagnosis was made; when she was admitted to the hospital. In three other cases, which the doctor had seen in the same service, the pregnancy had gone to full term and the mother presented labor pains before the diagnosis was made. The fetus in all three cases excepting one was dead, which was shown after operation. One of the cases, however was removed by Dr. Lewis by the vaginal route after nine months' pregnancy. The fetus weighed eight pounds and lived for 25 minutes after delivery. However, the fetus usually dies before full term and the danger to the mother is greatly increased if the diagnosis is not made before rupture.

DR. KEITZ exhibited a specimen of extra-uterine pregnancy from one of his patients, which had recently been operated upon by Dr. H. S. Lewis. The diagnosis had been made before rupture and the patient was recovering.

DR. PERRILLIAT, in closing the discussion, stated that the statistics on the subject showed conclusively the increased danger of allowing extra-uterine pregnancies to rupture. In 500 cases not operated upon before rupture only 36 per cent. recovered, while in 500 cases operated upon before rupture, 77 per cent. recovered. Even if the fetus is allowed to go to the full term, the danger to the mother is considerably greater and the chances of saving the child very small.

#### PRESENTATION OF CASES.

DR. BRUNS presented *a case of a white girl about seven years old who had been cured of congenital ptosis of the right eye by the operation of Motais.* Dr. Bruns stated that he had performed

this operation four times with excellent results, excepting in the first case. The first case resulted in an ulcer of the cornea from pressure of the knot, which had been tied on the inside. In the three subsequent cases he had tied the knot on the outside of the lid, with excellent results. The patient presented was able to look up and was able to elevate the lid synchronously with the eye, which meant that the new levator tendons worked in perfect accord with the superior rectus.

#### DISCUSSION.

DR. GESSNER wished to know what was the cause of congenital ptosis.

DR. BRUNS, in closing, stated that most of the cases were caused by the congenital absence of the tendon. The present case was operated upon last December 15, and was evidently a permanent cure.

DR. DABNEY *presented the case of a white boy*, about 18 years old, with the following history: His parents are healthy and quite intellectual, but the patient, while very ambitious, is unable to apply himself closely to his studies and is dull in his school work. The patient apparently is in perfect health, with ruddy complexion and is fairly well nourished, with no protrusion of the abdomen. He presented evidences of ground itch on his right index finger and this had led the doctor to *make a diagnosis of uncinariasis*. He had given the patient five grains of thymol simply for the purpose of diagnosis, and had been able to find abundant eggs of the uncinaria in his feces. Dr. Halsey and Dr. Guthrie had also examined the patient's stools and had likewise found the uncinaria eggs. The doctor presented the case to the Society for the reason that his physical appearance would not lead one to make a diagnosis of uncinaria. Through the courtesy of Dr. C. F. Sauter, the living worm as well as the eggs in the various stages of segmentation were seen. Dr. Halsey demonstrated a marked eosinophilia—about 25 per cent. What the doctor wishes to call especial attention to was that in spite of the appearance of the young man, a diagnosis was first made from clinical data and then confirmed by the bacterologist.

## DISCUSSION.

DR. HALSEY stated that he had examined the patient's blood and found 95 per cent. hemoglobinism with no leucocytosis and with a normal amount of red blood cells. However, a differential count had revealed 25 per cent. of eosinophiles. Examination of the patient's stools had showed numerous uncinaria ova.

## RELATION OF CASES AND MEDICAL NEWS.

DR. VAN WART *reported three cases of hysteria treated in the hospital by the rest treatment*, all with success. These patients are usually very difficult to handle, and the doctor thought that better provisions should be made for their treatment in our institutions.

DR. GESSNER *reported three cases of whooping cough in which he had used Dr. Kilmer's Elastic Bands around the abdomen*. In one of the cases there were excellent results in diminishing the paroxysms of coughing. He wished to know if any other member of the Society had used the belt and what was their experience.

DR. KAVANAUGH stated that he had not used Dr. Kilmer's Belt, but that two years ago he had had occasion to vaccinate a child suffering with whooping cough. The paroxysms were cut short after the vaccination. Since then he had vaccinated two children afflicted with whooping cough, with similar results and he thought that perhaps the vaccination had some virtue in stopping the whooping cough.

DR. CHAVIGNY *reported a case of paralysis of the facial nerve of the left side, following la grippe*. He wished to know the cause of the paralysis and the prognosis of the case.

DR. VAN WART stated that paralysis of the seventh nerve often follows specific infection. As a rule the patients get well in about six months, but the prognosis will depend upon the electrical reactions of the nerve. In those cases where degeneration of the nerve has taken place, there have been some cures recently reported by forming an anastomosis between the facial nerve and the spinal accessory or the hypoglossal nerve.



## Communications.

---

### IS THE MISSISSIPPI A SOURCE OF TYPHOID INFECTION IN LOUISIANA?

*Editors New Orleans Medical and Surgical Journal.*

Gentlemen:—Ever since the beginning of the warm season, there have been numerous cases of typhoid fever in our section, along the Mississippi River. Understand that it has prevailed extensively in the neighboring parishes also. We have been at a loss to account for the existence of this disease, since the usual cause was absent, and is still absent. My own experience in the past, has led me to look for the appearance of typhoid after a long drought, when the usual supplies of rain water are exhausted, and recourse is had to wells, ponds and the Mississippi River.

So far this season, we have had no drought, and typhoid made its appearance during a rainy season. I was not able to trace my cases to any common source of infection, except:

- (1.) Ice made from undistilled water.
- (2.) Mississippi River water.

I was inclined to the opinion that the ice was at fault, and wrote Dr. C. D. Simmons of Baton Rouge, from which place most of our ice was coming, to investigate the mode of manufacture. He replied, that the water used was from an artesian well, and was distilled before freezing. I then wrote Dr. Wm. H. Welch, asking his opinion upon the possibility of infection from the Mississippi River, and enclose his reply, which is well worthy of publication in this connection.

The report of Dr. Kohnke concerning the sale of ice made from "undistilled" water, published in the New Orleans papers of September 14, 1904, is another side light upon this very important question.

The question that arose in my mind was, whether Mississippi water was not the ultimate source of infection, even when ice was the medium. If this water can be a source of infection for Typhoid, the sooner found out the better. There could not possibly be a more important question for the Carnegie Institute to take up for investigation. Yours very truly,

Union P. O., La.

B. A. COLOMB.

Baltimore, July 6, 1904.

Dear Doctor:

Undoubtedly the Mississippi River in various parts of its course is seriously contaminated with the typhoid bacillus. The conditions in St. Louis, for example, indicate this, and the sources of such contamination are often evident enough.

Doubtless by dilution, sedimentation and other natural agencies the river water thus contaminated may become more or less purified in its course further down-stream, so that perhaps the water can be used there for drinking purposes with little or no danger. Special examinations are required to determine what the conditions may be in any given locality. In general, however, it is the teaching of modern hygiene that sewage should not be permitted to enter running streams and rivers, but so extensive is this practice and so difficult is it to control, that the water of most of our streams and rivers in this country has become more or less contaminated, and is a fruitful source of typhoid fever. This condition constitutes really our greatest problem in public hygiene at present. Of course, boiling water destroys the typhoid germ. A system of public sand filtration, properly constructed and administered, is an efficient protection, but ordinary domestic filters are of little use. The Pasteur or Chamberland domestic filters will filter out the typhoid bacillus for a time, but require skill in its use.

If the careful study of the distribution of the cases of typhoid fever in your locality points to infection from the use of the Mississippi water, your conclusion on this matter is probably correct, and it would be interesting for you to examine into the sources of infection up-stream. The present law suit between Missouri and Illinois, concerning the discharge of the Chicago sewage into the Illinois River, will bring out an immense mass of facts and opinions on this whole matter of the behavior of the typhoid bacillus in water. While the bacilli do not ordinarily multiply there, they may survive for several days and thus be carried many miles, depending on the rapidity of the current and other factors down stream. Probably they could not survive the long journey from Chicago to St. Louis, but there are many sources of infection both on the Illinois, Missouri and Mississippi rivers nearer St. Louis. You will probably find such sources of infection from reception of material from human habitations abundantly within a hundred

miles of your residence on the Mississippi, by noting the manner of disposal of sewage and drainage, and the prevalence of typhoid fever further up-stream. Even such a large body of water as the Mississippi furnishes no protection against conveyance of the germs through the drinking water, although of course the danger is lessened by dilution. I am, Very truly yours,

WILLIAM H. WELCH,

---

### **The New General Hospital of Mexico City.**

By Dr. L. G. LE BEUF, New Orleans.

I suppose that the last hospital built is always the most thorough, or most up to date, on account of the number of improvements and the additional discoveries which are added every day to conditions perfect heretofore. It has been my rare good fortune within the last two or three weeks to visit the most thoroughly equipped and most complete up-to-date pavillion plan of hospital construction in the world.

El Hospital General, in Mexico City, was opened and inaugurated on February 4, 1905, and I visited it two weeks after this opening. It is a monument to the intelligence and medical ability of Dr. Eduardo Liceaga, and to the wide awake administration of the most enlightened President Mexico ever had. It consists of forty-nine separate stone buildings situated at La Piedad, one mile out of town on a high plateau, perfectly flat and beautifully drained, and is enclosed in a high wall which encloses about ten or twelve square blocks.

Each ward is built in a separate building of stone and tile flooring, with lavatory, closet, bath room, infirmary, nurses' room and offices, and contains thirty iron beds. It is built high, with low window opening for different ventilations. These wards are kept scrupulously clean under an efficient system of trained nurses, made up almost entirely of Mexican women. A very large building is given up entirely to hydrotherapy, mechano-therapy and electro-therapy. This is admirable in its details, and can compare favorably with the most modern and extensive private institution of this kind in the North or in Europe. Dr. Fredrico Dufino, of Stockholm University, has charge of the mechano-therapy department, with massage, and it was pleasant to see the poorest of the Peon inmates

of the hospital receiving the most complete manipulation his condition required. The fitting of their gymnasium is perfect in every way.

The one factor in the entire plan which strikes the general practitioner most forcibly, specially with the comparison we are forced to draw with the facilities at our own home hospital, lies in the department called *de Infecciosas*. It is enclosed in a yard or subdivision of the grounds, which is entirely given to the infectious diseases. One building is given to the eruptive diseases of children, another to puerperal fevers, a separate building to smallpox, another to typhoid fevers, and one, in part construction, as a Lazarino, or segregating ward to await the period of incubation of suspects. And finally, a building for the tuberculous, which accomplishes every requirement demanded for the separation and proper open air hygienic treatment of this important disease.

This one ward or department should be copied at once by every hospital in the world. Enclosed by an eight foot wall, this building is surrounded by wide galleries made entirely of glass to allow the sun to reach the patients when they have to be closed in. Then there are sun yards for the invalids to be rolled in, with dry asphalt pavements and perfect drainage. A system of care-taking and forced feeding is employed. Absolutely the most efficient control of this disease you can desire. Consumption rarely ever starts in Mexico City, but of course many cases are brought there.

The entire management of this grand institution is under the control of Dr. Fernando Lopez, whose kind courtesy allowed me the privilege of visiting it.

A short distance from this is the hospital, where once a week, all the prostitutes of Mexico are examined and certified to by a very competent set of men under Dr. Jesus E. Monjaras, secretary of the Department of Salubridad. The system in vogue there could with benefit be copied and used in New Orleans, as we have so many of the same conditions existing here that are found in the tropics.



# N. O. Medical and Surgical Journal

## Editorial Department.

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

---

### Louisiana State Medical Society.

We are publishing under the proper heading the preparations that have already been made by the Committee of Arrangements and its sub-committees for the meeting of the State Medical Society next month. This will show that everything is being done to insure a successful meeting. It is time for us to urge all members to take a firm determination to attend this next meeting and to make all necessary calculations to make sure that nothing will interfere with their coming. The country members can rest assured that everything will be done for their comfort and their entertainment, while the city members must recollect that they are the hosts and are in duty bound not only to provide proper entertainment, but to show their guests a full measure of attention and courtesy by attending the sessions of the Society in person.

We hope that the chairmen of all committees will be prepared to make prompt reports, as too often have delay and confusion resulted from a lack of punctuality. We trust also that all the officers will have their reports well in hand in order that the first session of the Society can dispose of the major part of the business so that ample time may be left for the scientific work without inconvenient interruption, which has often followed from the postponement of the presentation of reports.

Last year's meeting was a record-breaker, and, while there has been no boom, we believe the Society has been strengthened this year, hence this meeting should surpass all others. Let each member make a determined effort to come, even if need be at some sacrifice, and all in the end will be repaid by the scientific work achieved and the good fellowship increased.

### Restrictions of Proprietary Medicine.

The trustees of the American Medical Association have created a "Council on Pharmacy and Chemistry" with the object of analyzing the status of pharmaceutical preparations now circulating and

to be circulated from the laboratories, factories or other places of business of the concern making for sale any "drug, chemical, or preparation used in the treatment of disease." The list of men composing the Council is a most excellent one and many of them are men of integrity and purpose. The task is a large one and worthy of the support of every man practicing legitimate and rational medicine.

With an initial purpose of studying all proprietary medicines with any pretenses to merit, the offices of this Council must gradually be extended to the point of protecting the profession and the public against those nostrums, which are on the border line of respectability.

It is proposed at this time to investigate "the various medicinal preparations offered to physicians and not included in the U. S. Pharmacopeia, or other standard text-books or formularies." Preparations which conform to the standard established by the "ten rules" of the Council will be incorporated in a book called "New and Non-Official Remedies," which is to be published by the *Journal of the A. M. A.* The scope of the Council is to pass upon the synthetic drug, compound, mixture, etc., before it is 'incorporated.' The 'rules' are quite comprehensive:

RULE 1.—No article will be admitted unless its active medicinal ingredients and the amount of such ingredients in a given quantity of the article, be furnished for publication. (Sufficient information should be supplied to permit the Council to verify the statements made regarding the article, and to determine its status from time to time.)

RULE 2.—No chemical compound will be admitted unless information be furnished regarding tests for identity, purity and strength, and, if a synthetic compound, the rational formula.

RULE 3.—No article that is advertised to the public will be admitted; but this rule will not apply to disinfectants, cosmetics, foods and mineral waters, except when advertised in an objectionable manner.

RULE 4.—No article will be admitted whose label, package or circular accompanying the package contains the names of diseases, in the treatment of which the article is indicated. The therapeutic indications, properties and doses may be stated. (This rule does not apply to vaccines and anti-toxins nor to advertising in medical journals, nor to literature distributed solely to physicians.)

RULE 5.—No article will be admitted or retained about which the manufacturer, or his agents, make false or misleading statements regarding the country of origin, raw material from which made, method of collection or preparation.

RULE 6.—No article will be admitted or retained about whose therapeutic value the manufacturer, or his agents, make unwarranted, exaggerated, or misleading statements.

RULE 7.—Labels on articles containing "heroic" or "poisonous" substances should show the amounts of each of such ingredients in a given quantity of the product.

RULE 8.—Every article should have a name or title indicative of its chemical composition or pharmaceutic character, in addition to its trade name, when such trade name is not sufficiently descriptive.

RULE 9.—If the name of an article is registered, or the label copyrighted, the date of registration should be furnished the Council.

RULE 10.—If the article is patented—either process or product—the number and date of such patent or patents should be furnished. If patented in other countries, the name of each country in which patent is held should be supplied, together with the name under which the article is there registered.

### **"The Master Word in Medicine."**

The cynic finds no audience in the public highway; in these times it is only the speedy optimist who draws the crowd. The cry that art is long and life is fleeting has been relegated and the dreamer resents any awakening to a picture of his decrepitude mirrored from his future. Why should our good friend Dr. Osler have raised such ghosts? There lingers yet in the minds of many of us that other day when, scarcely a year ago, he crystallized the effect of much of success in life in the motto "work." It is always sad to close the door of an empty house, once full of everything that was yours, but is it best to burden the next occupant with your sorrows? The burden of a new endeavor should have no terror in its shadow. Why discount a man's years by promise of decay? Why burden his earnest hours with the spectre of a grewsome paralysis? The grim destroyer marks his coming by well known signs and these need no interpreter. The miser misses none of his endeavor until the end; the soul of a man struggles after light until he finds it; the weary traveler wanders until his thirst is satisfied. Even if the facts remain, it were better to bask in the brightness of an Eldorado than suffer in the memory of things to come. And spite of philosophies, even he who sang his "*Morituri Salutamur*" found the signal of hope.

"But why, you ask me, should this tale be told  
To men grown old, or who are growing old?  
It is too late! Ah, nothing is too late  
'Till the tired heart shall cease to palpitate.  
Cato learned Greek at eighty; Sophocles  
Wrote his grand Oedipus, and Simonides  
Bore off the prize of verse from his compeers,  
When each had numbered more than four score years,  
And Theophrastus, at four score and ten,  
Had but begun his 'Characters of Men.'  
Chaucer, at Woodstock, with the nightingales,  
At sixty wrote the Canterbury Tales;  
Goethe at Weimar, toiling to the last,  
Completed Faust when eighty years were past.  
These are indeed exceptions; but they show  
How far the gulf-stream of our youth may flow  
Into the Arctic regions of our lives."

---

"For age is opportunity no less  
Than youth itself, though in another dress,  
And as the evening twilight fades away  
The sky is filled with stars, invisible by day."

---

And until the inverted torch led him on his last way, Longfellow lived out this ideal.

It does not need the searchlight of experiment to know that there are many more men, of affairs, of artistic training, of scientific worth, who are useful to themselves and others until their spark of life flashes to another soul.

Dr. Osler has received wide notice for his philosophic thought; but we who know him can see that it is but the sentiment of his own reflection over the labor ahead of himself which caused him to think of the meaning of the usefulness of men in their prime. We are as certain as we are of impartial time itself, that that "master word" of "work" will still demonstrate Osler himself no mean interpreter of its fullest scope, and we are yet to sit at the footstool of his erudite mind and feel that the shadow of forty, or fifty, or sixty, will not strike across the pathway of a brilliant sun not yet ready to wane.



## Abstracts, Extracts and Miscellany.

---

### Department of Surgery.

In charge DR. F. W. PARHAM and DR. F. A. LARUE.

---

ON WHAT LINES IS THE TREATMENT OF MALIGNANT DISEASE ADVANCING? Dr. Robert Abbe, in the *New York Medical Record* for December 31, 1904, publishes an article which furnishes much food for thought.

Gain, in the treatment of malignant diseases, he thinks, has been made in three notable directions:

*First.*—In the recognition of the principle that carcinoma and sarcoma are primarily of local origin. Cure, therefore, may be expected from early operation.

*Second.*—In recognizing the enormous value of increasingly extensive operation in advanced cases—widening the field of skin removal and lymphatic dissection.

*Third.*—In establishing the value of radio-therapy (including all the forms of radiant energy.)

Apart from these we have the record of attempts to utilize serum therapy—antitoxin—and tissue metabolism by oophorectomy (Beatson's method) and thyroid extract administration.

Of the first and second principles little need be said, as they are gaining wider recognition every day.

In certain cases, however, we seem to have made little advance by cutting operations, as recurrence seems almost certain, as for instance in any but the earliest forms of cancer of the tongue. In this class of advanced malignant diseases he thinks we may look for help from radio-therapy.

Of Röntgen ray effects there have been many demonstrations; of radium radiations we have now clear proof of the same lethal effect on the nests of cells constituting the tumor. The antibacterial action which is at best very feeble, can play but a trifling part and the feeble heat emitted by radium is insignificant.

We must look, then, to the rays, which are of negative electrons emitted by radium and the Röntgen ray, as the agent of power. These equally discharge the electroscope with great rapidity, and in this they are rivaled by the electric spark from the coil passing

between iron electrodes. The latter device, in the form of a Piffard lamp, is richer in ultra-violet rays than any known instrument, but its power for good seems to reside in active rays other than the ultra-violet. This great agent Abbe has used in connection with Röntgen rays and in it has found a strong ally.

He concedes the therapeutic influence of Coley's serum in certain, especially unusual, types of sarcoma, but thinks the use of serum, as advocated by Doyen, is still *sub judice* and awaits the report of the French Surgical Commission. He believes the future full of promise for the three forms of radiant energy and from radium we may expect the greatest results.

With the promise of a large production of radium in Austria he believe the next year will reveal further fruits of research and treatment.

EXPERIENCES WITH IODOFORM.—The following remarks are abstracted from the *Lancet* of Jan. 21, 1904.

The material, which is used for bone-plugging (*Iodoform-Knochenploombe*, as it is called in German) consists of a mixture of 60 parts of the finest pulverized iodoform and 40 parts of spermaceti and forty of oil of sesame. This compound at the ordinary temperature of the room (winter or summer) forms a stiff, yellow mass, but becomes fluid at a temperature of 50 degrees C. (122 degrees F.) As this mass liquifies, the oily constituents separate, so that, in order to obtain a homogeneous emulsion, the substance, after melting, must be well shaken before properly fitted for use in the filling of cavities. Glass tubes (test tubes) closed with rubber stoppers, seem to be best adapted for the purpose. Filled to about two-thirds they may be kept in stock for any length of time.

When Professor Moorhof began his studies and researches on bone cavities, five years ago, a putty-like paste of iodoform was used, but it was soon found that to achieve success the substance employed must accomplish a hermetic and perfect filling of the cavity, and this desideratum could only be attained by the pouring in of a fluid substance which would become solid *in situ*. The solid mass must be in contact with, and adhere to, every portion of the walls, penetrating every tissue and interstice, filling the cavity completely. The cavity to be filled must, therefore, be dry. The dentists' rules for filling teeth would apply here, except that the shape of the cavity is of no consequence. For drying the bone cavities hot air is

employed and applied with the drying instrument which Dr. Silbermack has described, but a simpler apparatus with double bag or bellows may be improvised by means of which sterile, cold, dry air may be blown into the wound.

Of course, it is absolutely necessary that all diseased tissue be removed. When this has been done and the cavity thoroughly cleansed and dried with the cold or hot air, the bone-plugging or bone filling substance is poured in and made to permeate to the remotest corner of the bone cavity. After this shall have set well, which is done in a few minutes, the wound is closed by sutures not too closely inserted. The fistulous openings will usually serve well for drainage, but at least nothing more than gauze or oiled silk dressing ought to be employed.

The dressing should not be regarded as a pressure pad; circulatory disturbances ought to be avoided.

The bone-plugging material has only temporary sojourn in the cavity. It is either eliminated gradually through the wound if open, or it may be absorbed and consumed if in a closed wound. Iodine in the urine is the evidence of its absorption, but this latter is so slow and gradual that all danger of intoxication is eliminated.

Size and extent of the bone cavity are, therefore, no contra-indication to the use of the method. The plugging protects the granulations from septic disintegration, a necessary consequence of persistence of cavity. The plugging preserves the entire granulation; nothing is lost and the organic restoration is, therefore, much more rapid and complete.

Defects in the bone disappear and the normal shape and size of the bone are restored in a given time.

As to how, histologically, the bone cavity is filled with bone tissue, we have two guides, first, the skiagrams taken from time to time, and second, the observation of the gradual absorption of the filling substance. The latter can only occur through the action of the granulations; consequently, granulations must first sprout from the walls of the cavity. The production and gradual growth of bone tissue are effected by a primary formation of new connective tissue. Subsequently definite osteoid tissue is formed from this by the deposition of lime salts.

The complete restoration of bone is shown in the skiagrams

by the gradual extension of the bone shadow through the originally lighter shadow of the bone plugging.

The method is, of course, not applicable in the treatment of acute osteomyelitis, because asepsis is not attainable.

It has its field in chronic bone disease, osteomyelitis and tuberculous disease; its use, however, is not confined to the continuity of bone, but may likewise be applied to any cavity made by the removal of bone in whole or in part. Moorhof has used it in two cases of antrum of Highmore disease, and even in one case of extensive curettage of tuberculous glands in the mediastinum. Special techniques are described for the wrist, the elbow-joint, shoulder-joint, ankle-joint, knee-joint and hip-joint in addition to the regular operations on the bones in continuity.

In 79 cases of osteomyelitis, 108 cases of tuberculous disease, two orthopedic cases, two fillings of the antrum of Highmore and four dental cysts, he has in no single instance to report a failure.

---

## Department of Obstetrics and Gynecology.

---

In charge of DR. P. MICHINAED, assisted by DR. C. J. MILLER, New Orleans

---

THREE ATTACKS OF ECLAMPSIA OCCURRING IN A MULTIPARA.—(A. J. Sturmes, *Jour. Obstet. and Gynec. British Empire*). The above report is of interest because of the light thrown on a question often asked the physician, viz.: Is a woman who has had eclampsia more liable to an attack during future labors? In his experience (which is quite large) at the Government Maternity Hospital, Madras, India, two attacks occurring in the same patient are unknown. In the last ten years there have come under treatment 271 cases of eclampsia, and in no single instance among these, except in this case, has eclampsia occurred twice. Case of recurrent eclampsia are not unknown in literature, but he imagines that these attacks in the same individual are without record. The present case is a good example of the fact that the affection is not due to disease of the kidney. The microscopical and chemical examination of the urine show that when she left the hospital after her third attack, there was no disease of the kidney, and if previous disease had been present it would in all probability have been accentuated.



## Department of Therapeutics.

In Charge of DR. J. A. STORCK, New Orleans.

**QUININ AND SODIUM SALICYLATE IN PUERPERAL FEVER.**—According to Dr. P. Ovary, a mixture of equal parts of quinin sulphate and sodium salicylate is much more efficacious in puerperal fever, than ether medicament administered alone. He administers the combination in doses of 10 grm. every three hours. Three or four doses are generally sufficient to regulate the fever in mild cases; but it may be administered as long as the case requires. Of 28 cases treated with this combination, 26 ended in recovery. According to the author a double decomposition takes place in the stomach, quinin salicylate and sodium sulphate being formed. The quinin salicylate has a superior efficacy on account of its being in *statu nascendi*, while the sodium sulphate has also a favorable laxative action.—*La Sem, Med.*, 1904, No. 37—*Merck's Archives*.

**UNNA'S MIXED TREATMENT OF LEPROSY.**—Ichthyol internally and externally with sulphur baths and friction of the lesions with ichthyol soap, formed the treatment adopted in the three severe cases reported. One was apparently entirely cured and the two others were very much improved.—*Grèce Médicale* (Syra, Greece)—*N. Y. Med. Jour.*

**INSECT BITE ICTERUS.**—Bauermeister had occasion to study in his own person a severe case of icterus with general dyspepsia and gastrointestinal catarrh, preceded by urticaria. The entire syndrome developed while traveling, after a night in which he had been bitten by numerous bed bugs. His trouble proved rebellious, but finally yielded to systematic stimulation of the bile secretion. This he accomplished with salicylic acid and sodium oleate. His personal experience and clinical observation compel him to extol this combination as remarkably effectual for gallstone and similar affections. His formula is .1 gm. each of salicylic acid and the sodium oleate, to which he adds a little menthol and phenolphthalen. He took three or four of these pills morning and evening, with a glass of hot water, sipped slowly, supplemented by a hot water bottle to the gall-bladder region for an hour or two. He

is convinced that systematic use of these therapeutic measures months there was no attack of epilepsy, and no evidences of bromism to Kuhn's recent indorsement of salicylic acid as a bile promoting remedy. Both he and Kuhn came to this conclusion independently.—*Therapeutische Monatshefte* (Liebreich's Berlin) *N. Y. Med. Jour.*

**BROMETONE FOR EPILEPSY.**—Erichsen reports an interesting case in the *Medical Age* of September 25, 1904. After a previous history of nineteen well defined attacks and the rejection of all bromides, because of a deranged stomach, brometone was administered in five grain doses three or four times a day. After sixteen months there was an attack of epilepsy, and no evidence of bromism. Although brometone contains 77 per cent. of bromin, the patient improved in weight, appearance and disposition.

---

## Department of General Medicine.

---

In charge of DR. E. M. DUPAQUIER, New Orleans.

---

**ARTERIAL PRESSURE AND CHLOROFORM ABSORPTION.**—Experiments bearing on the relation of arterial pressure to the amount of chloroform absorbed, demonstrate that the continuous examination of arterial pressure prevents most positively all accidents of chloroform anesthesia, whatever may be the mode of chloroforming.

Chloroform, as proven by facts, causes death by a toxic action on the heart, or the cardiac nervous centers.

This toxic action studied by direct examination of arterial pressure instead of cardiac contraction, is thus reproduced in all its phases. The following is the result:

1. Examination of arterial pressure affords information before the appearance of changes in the respiration.
2. Changes in the respiration appear only when the decrease of arterial pressure has already signaled "danger ahead."

Again, indications furnished by respiration are not only late, but difficult of differentiation and appreciation.—*Académie des Sciences*. 13 *Fevier*, '05. *Gaz. des Hopitaux*.

[NOTE—This important subject suggests to the reader the perusal

of The Clinical Study of Blood Pressure. A guide to the use of the Sphygmomanometer, by Theodore C. Janeway, M. D., etc. Seventy-five illustrations in the text. Many in colors. D. Appleton and Company, 1904.]

THE USE OF WATER BEFORE ADMINISTERING CHLOROFORM.—Deglutition occurring during the period of excitement carries into the stomach the chloroform vapor, which causes dilatation and reflex, contraction of the viscus, hence vomiting. To obviate this, Denucé of Bordeaux, gives four glasses of cool water during the two hours preceding anesthesia, the last draught just at the time of beginning anesthesia. Since carrying out this plan, he states, that at none of his operations neither vomiting nor even nausea have ever occurred.—*Tribune Médicale*.

JABOULAY'S METHOD OF TREATING ENURESIS.—Assuming that enuresis is due to a functional disturbance of the sympathetic nerve in the hypogastric plexus, an injection of artificial serum is made into the retro-rectal space with a view of producing some action on the plexus, either by elongating or modifying in some manner the ganglia and nerve filaments, etc. The technic is the following:

The patient is placed on his right side with the right leg extended, and the left moderately flexed. Standing on the left, the attendant inserts his index finger into the rectum, then pushes the needle point down at the tip of the coccyx, or a little on its side, guided by the finger in the rectum. The pain caused by these preliminaries soon subside, and the injection can now be made. As the fluid pours out, the finger in the rectum feels a lump rising behind the posterior wall of the gut. From 100 to 150 c.c. of serum are used at first. The result is generally immediate. Even, at times the patient must be catheterized to regulate micturition. Repeat injection if necessary.—J. REVEL—*Thèse de Lyon*, 1904.

CALOMEL IN RHEUMATIC FEVER.—The adjunction of calomel to the salicylic medication enhances the beneficent action of the latter, shortening the duration of the attack. On the first day, calomel 50 or 60 centigrams in three doses, in conjunction with the usual methyl salicylate '*enveloppements*,' disinfection of the mouth and milk diet.

On the second day no calomel; in its stead, two or three grams of sodium salicylate.

On the third day, calomel 30 or 40 centigrams. Usually, fever and pain begin to decline from the fifth day, but if necessary give more calomel, 20 centigrams on the fifth day. The salicylate by mouth, and the wintergreen oil inunctions are continued in decreasing doses until recovery.

As calomel injected intra-muscularly has given good results in chronic rheumatic arthritis, the note on calomel here inserted is worthy of our attention. Authorities: Toupet, de Gorsse, Siner of Vienna; Stengel of Philadelphia; Manceaux.—*Gaz. des Hôpitaux*, February 21, 1905.

---

## Department of the Ear, Nose and Throat.

---

In charge of A. W. DEBOALDES, M. D., and GORDON KING, M. D.  
New Orleans.

---

THE RELATION OF ASTHMA TO NOSE DISEASE.—Dr. Greville MacDonald gives some interesting deductions on this subject from his own personal experience in which he calls attention to the fact that asthma is frequently to be cured by nasal treatment, even when the ordinary nasal lesions, which are given the credit of producing reflex asthma are not present.

He classifies the cases observed by him in three series: (1). Those pointing to the relief or cure of asthma by removing causes of obstruction to nasal breathing or abnormalities giving rise to intra nasal pressure; (2), those where the treatment of any other sort of abnormality in the nose is similarly successful; (3), those where the mere cauterization of mucous membrane in a comparatively healthy nose results in cure. It is a well substantiated fact that removal of hypertrophies of the erectile tissue, irregularities of the septum causing pressure of obstruction, adenoids and polypi in asthmatic subjects often results in relief or cure of the asthma. The author mentions two cases reported by his brother, Dr. McKay MacDonald, that were relieved of asthma merely by the digital examination of the nasal pharynx made for adenoids.



The result of removal of polypi from the nose is more uncertain as to relief of the asthmatic condition.

In the second series he mentions cases relieved of asthma by cauterization of thickened turbinated bodies, septal thickening, and edema of the nasal mucosa associated with sneezing and irritability of the nose. One case had incipient atrophic rhinitis, and was cured by treatment of that condition. In regard to the third class of cases, the author refers to Dr. Alexander Francis, who has written comprehensively on this subject. The latter has given statistics showing that many cases of asthma without apparent nasal lesion, can be cured by cauterization of the upper part of the cartilaginous septum.

In conclusion, the author summarizes 95 cases of asthma, over 40 per cent. of which were cured by treatment of the nose.—*British Medical Journal*, Nov. 5, 1904.

---

## Louisiana State Medical Society Notes.

---

In charge of DR. P. L. THIBAUT, Secretary, 141 Elk Place.

---

**OFFICERS**—President, Dr. Charles Chassaignac, New Orleans; 1st Vice President, Dr. Oscar Dowling, Shreveport; 2nd Vice President, Dr. L. C. Tarleton, Marksville; 3rd Vice President, Dr. J. F. Buquoi, Colomb; Secretary, Dr. P. L. Thibaut, New Orleans; Treasurer, Dr. M. H. McGuire, New Orleans.

**COUNCILLORS**—Drs. A. G. Friedrichs, Chairman, 2nd Cong. Dist., 641 St. Charles St., New Orleans; J. J. Ayo, Sec'y., 3rd Cong. Dist., Bowie; P. E. Archinard, 1st Cong. Dist., New Orleans; S. L. Williams, 5th Cong. Dist., Oak Ridge; N. K. Vance, 4th Cong. Dist., Shreveport; C. M. Sitman, 6th Cong. Dist., Greensburg; C. A. Gardiner, 7th Cong. Dist., Sunset.

---

### ARRANGEMENTS FOR 1905 MEETING, MAY 9, 10 AND 11.

The Committee on Arrangement for the 1905 Meeting, met at the rooms of the Orleans Parish Medical Society, on March 15, Dr. Wm. M. Perkins, Chairman, presiding.

The chairman announced that the following chairmen of sub-committees had been appointed by him:

On Transportation, Dr. M. J. Magruder, Morris Building.

On Exhibits, Dr. A. Jacoby, Macheca Building.

On Registration, Dr. E. J. Graner, Morris Building.

On Banquet, Dr. J. F. Oechsner, 124 Baronne.

Dr. Perkins announced that the New Orleans Polyclinic had

offered to entertain the members of the State Society at luncheon on the first day of the meeting. The offer was gratefully accepted.

Dr. Jacoby reported that he had had blue prints of the meeting hall made, and had enclosed copies of same in circular letters to prospective exhibitors.

Dr. Graner promised to give by far the highest registration that the Society had ever seen.

Dr. Oechsner reported that things were progressing, and promised to give the members a good time for the winding up of the meeting.

Dr. Magruder submitted the following report, to which we wish to call the special attention of members residing outside of New Orleans.

The Chairman of the Committee on Transportation desires to state that all the railroads have agreed to make a rate of one and one-third fare, on the certificate plan, to members attending the Annual Meeting of the Louisiana State Medical Society at New Orleans, May 9, 10 and 11, 1905.

In purchasing tickets to New Orleans the member must pay full fare. He must insist that the agent furnish him with a receipt, which, being certified by the Secretary of the Society during the meeting, will entitle the holder to a return ticket at one-third the regular rate.

WE ARE SATISFIED that it will be good news for the members of the Society that Dr. E. B. Craighead, President of Tulane, has consented to be the orator at the annual meeting.

ORIGINAL PAPERS.—Members desiring to read original papers at the coming meeting, are requested to send their titles without delay, if they desire to be accorded a place on the program. The Committee on Scientific Work has decided to accept no title sent after April 25, as by that date all final copy for the program must be in the hands of the printer.

THE POINTE COUPEE PARISH MEDICAL SOCIETY met last month and elected the following officers: President, Dr. A. Tircuit; Vice-President, Dr. R. McG. Carruth; Secretary-Treasurer, Dr. Ruffin Cole Claiborne.

PLAQUEMINES PARISH MEDICAL SOCIETY elected the following officers: President, Dr. J. R. Johnson; Vice-President, Dr. V. O. Schayot; Secretary-Treasurer, Dr. H. L. Ballowe.

## MEETING OF THE COUNCIL.

A meeting of the Council of the Louisiana State Medical Society was held on the 8th of last month, at the rooms of the Orleans Parish Medical Society, Dr. A. G. Friedrichs, chairman, presiding. The following Councillors were present: Drs. N. K. Vance, S. L. Williams, C. M. Sitman, and J. J. Ayo, Secretary of the Council. The chairman called the attention of the Council to the fact that the date of the Annual Meeting was fast approaching, and that each Councillor should bestir himself and make a personal canvass of his district. He urged each member of the Council to place his shoulder to the wheel in an active effort to make the coming meeting the banner meeting of the Society. Each Councillor then reported to what extent his district was organized and promised to use his best efforts in making the organization complete. The meeting then adjourned to May 8th, the day previous to the Annual Meeting of the Society.

## CHAIRMEN OF SECTIONS, SUBJECTS FOR DISCUSSION AND OPENERS OF DISCUSSIONS.

GENERAL MEDICINE.—Chairman, Dr. L. G. LeBeuf, of New Orleans.

Subject: "*Pneumonia*."

To open discussion: Drs. Charles Galloway, of Timon, and Nash Collins, of Delhi.

SURGERY.—Dr. C. J. Grémillion, of Alexandria, Chairman.

Subject: "*Fractures of the Lower Extremity of the Radius*."

To open discussion: Drs. E. D. Martin, of New Orleans, and E. D. Newell, of St. Joseph.

NEUROLOGY.—Chairman, Dr. L. L. Cazenavette, of New Orleans.

Subject: "*Peripheral Neuritis*."

To open discussion: Drs. R. M. Van Wart, of New Orleans, and E. M. Hummel, of Jackson.

MATERIA MEDICA AND THERAPEUTICS.—Chairman, Dr. P. A. Boykin, of Jeanerette.

Subject: "*Hemostatics*."

To open discussion: Drs. R. McG. Carruth, of New Roads and W. L. Egan, of Shreveport.

DISEASES OF CHILDREN.—Chairman, Dr. E. D. Fenner, of New Orleans.

Subject: "*Pneumonia in Children*."

To open discussion: Drs. T. S. Kennedy, of New Orleans and P. J. Dansereau, of Labadieville.

OBSTETRICS AND GYNECOLOGY.—Chairman, Dr. L. Perrilliat, of New Orleans.

Subject: "*The Bladder in Gynecology.*"

To open discussion: Drs. E. L. Irwin, of Clinton, A. W. Jones, of Monroe.

GENITO-URINARY DISEASES.—Chairman, Dr. C. Menville, of Houma.

Subject: "*Simple Urethritis Complicated with Lithoma and Urethro-Mania.*"

To open discussion: Drs. P. J. Gelpi, of New Orleans and G. J. Sabatier, of New Iberia.

DERMATOLOGY.—Chairman, Dr. Isadore Dyer, of New Orleans.  
Subject: "*The Bites of Insects.*"

To open discussion: Drs. Ralph Hopkins, of New Orleans, and S. L. Scruggs, of Cloutierville.

OPHTHALMOLOGY.—Chairman, Dr. O. M. Dowling, of Shreveport.

Subject: "*The Necessity and Abuse of Glasses for Young People.*"

To open discussion: Drs. E. A. Robin, of New Orleans, and F. E. Girard, of Lafayette.

OTOLOGY.—Chairman, Dr. J. R. Fridge, of Baton Rouge.

Subject: "*Suppurative Otitis Media.*"

To open discussion: Drs. W. Scheppegegrell, of New Orleans, and E. O. Powers, of Grangeville.

MEDICAL JURISPRUDENCE.—Chairman, Dr. A. L. Metz, of New Orleans.

Subject: "*Modern Embalming Considered from a Medico-Legal Standpoint.*"

To open discussion: Drs. D. N. Foster, of Franklin, and S. J. Smart, of Logansport.

SANITARY SCIENCE AND QUARANTINE.—Chairman, Dr. Quitman Kohnke, New Orleans.

Subject: "*Preventive Medicine.*"

To open discussion: Drs. W. G. Owen, of White Castle, and J. S. Stephens, of Natchitoches.

BACTERIOLOGY.—Chairman, Dr. John J. Archinard, of New Orleans.



Subject: "*Serums, Toxins and Vaccines as Aids to Diagnosis and Treatment.*"

To open discussion: Drs. N. K. Vance, of Shreveport, and O. L. Pothier, of New Orleans.

ANATOMY AND PHYSIOLOGY.—Chairman, Dr. M. Souchon, of New Orleans.

Subject: "*The Knee-Joint.*"

To open discussion: Drs. W. G. Branch, of Bunkie, and C. E. Edgerton, of Coushatta.

ORAL SURGERY.—Chairman, Dr. A. G. Friedrichs, of New Orleans.

Subject: "*Treatment of Fractures of the Inferior Maxilla.*"

To open discussion: Dr. B. A. Colomb, of Union.

CATAHOULA PARISH MEDICAL SOCIETY.—Organized, January 14, 1905. Chartered, February 21, 1905. President, Dr. W. H. Pugh, Lismore; Vice-President, Dr. H. S. Holloman, Jonesville; Secretary-Treasurer, Dr. C. Henry Burley, Monterey.

Other charter members are: Dr. J. H. Holstein, Jonesville; Dr. W. C. Coney, Glade; Dr. T. H. Madden, Tooley.

CONCORDIA PARISH HAS ORGANIZED and its Medical Society has applied for a charter. Details will be published in the next issue.

---

## Medical News Items.

---

AT THE RECENT MEETING OF THE TRAINED NURSES' ASSOCIATION, held in New Orleans at the College of Dentistry, the following officers were elected: Miss C. Fromherz, President; Miss Katherine Dent, Treasurer. At this meeting several interesting papers were read. Among these were those by Miss Hayes, Miss Comford and Miss Norman.

AT THE QUARTERLY MEETING OF THE STATE BOARD OF HEALTH, held February 24, the following medical officers were appointed: Medical Inspector, Dr. C. Milo Brady; Shipping Inspector, Dr. S. G. Gill; Bacteriologist, Dr. P. E. Archinard; Quarantine Inspector, Port Eads, Dr. J. Hope Lamb.

Quarantine physicians, Rigolets Quarantine Station, Dr. Fred Turney; Atchafalaya Quarantine Station, Dr. Wm. J. McClellan;

Calcasieu Pass Station, M. McCall, guard; Lake Borgne Canal Station, N. Serpas, guard.

In addition to these the board named the following physicians for service at Central American fruit ports: Bocas del Toro, Dr. Allen Jumel; Bluefields, Dr. F. W. Breaud; Port Limon, Dr. L. A. Wailles; Port Barrios, Dr. E. W. Neal.

THE NEW IBERIA BOARD OF HEALTH in the future will keep a record of all Vital Statistics.

A DECISION OF THE OHIO SUPREME COURT, holds that Christian Science healers cannot practice without a State license.

PERSONAL.—During the past month the following doctors were in the city: Dr. R. A. Brooks, of Ruston; Dr. N. K. Vance, of Shreveport, and Dr. A. A. Allain, of Bayou Goula.

Dr. M. S. Picard has removed from Dutchtown, La., to Gonzales to practice.

Dr. Espy M. Williams has gone to live at Morgan City, La.

Dr. E. W. Hunter, of Gallion, La., has moved to Mer Rouge, where he will reside.

Dr. Felix Formento has been appointed Consul of the Republic of Salvador to New Orleans.

Dr. A. Delcourt, Jr., has gone from Montegut to Houma to practice.

Dr. J. W. Bennett was elected President of the Lincoln County Medical Association, Brookhaven, Miss., March 11.

MARRIED.—Dr. Carl A. Weiss, of Lobdell, La., and Miss Viola Maine were married at Mer Rouge, La., on March 4.

The marriage of Dr. W. B. Singleterry and Mrs. Beatrice Perry took place at Wilson, La., on March 8.

Dr. Leon J. Menville, of Houma, La., was married to Miss Marie J. Marmande, of Bayou DuLarge, on March 3.

Dr. George F. Cocker, of New Orleans, married Miss Florence Schulze, on February 28.

DIED.—Dr. J. H. Fleetwood died of pneumonia at the age of 75 years, at Thibodeaux, La., on March 7. He was a native of Tennessee, but had spent most of his life at Thibodeaux.

Dr. L. H. Viallon, of Bayou Goula, died March 14 at White-castle. The doctor was a graduate of Tulane Medical College in 1889.

THE GEORGIA PRACTICIAN has appeared under the editorship of Drs. Martin Cooley and John S. Howkins. It is made up of a number of short articles and abstracts, all of which are well edited, and promise well for the future. The absence of advertising seems to be a feature of this journal, which has its home in Savannah.

THE REGULAR QUARTERLY MEETING OF THE ST. JAMES PARISH MEDICAL SOCIETY was held at Convent, on March 2nd, with the following members present: Drs. Geo. H. Jones, J. E. Doussan, of Lutchet; B. Winchester, L. A. Gaudin, J. F. Buquoi, of Convent; Gaston Gaudet, of Paulina; E. M. Levert, of St. Patrick. The subject for general discussion was "*Continued Fevers*," which brought forth interesting debate. Dr. J. F. Buquoi, of Convent, read a paper entitled: "A Plea for the More Judicious use of Digitalis in Chronic Valvular Diseases of the Heart."

Drs. Bolton and Brierre were elected new members, bringing the total membership to seventeen.

The next quarterly meeting will be held at Lutchet, on Thursday, June 1, 1905.

DR. WILLIE MERCK, OF THE HOUSE OF MERCK, of Darmstadt, has been distinguished with the degree of M.D., at the University of Halle, Germany.

THE NEW YORK POLYCLINIC RECENTLY CELEBRATED the liquidation of about \$40,000.00 indebtedness, accomplished by the personal donations of several of the staff and a substantial sum of \$20,000 by one of the Board of Trustees.

A DINNER IS TO BE GIVEN DR. WILLIAM OSLER previous to his departure for England. The dinner is to be given at the Waldorf-Astoria on Tuesday, May 2.

THE ALUMNI ASSOCIATION OF TULANE UNIVERSITY, as was timely and just, have honored the medical department with the

presidency, having elected Dr. Wm. M. Perkins to serve for the coming year. The members representing the department on the executive committee are: Drs. Wm. M. Perkins and Chas. Chas-saignac.

PROF. RUDOLPH MATAS, M.D., celebrated the twenty-fifth anniversary of his graduation in medicine, on March 19. He was surprised by a delegation of students and friends, and was presented with a silver service, also a loving cup. The *Journal* extends congratulations.

---

## Book Reviews and Notices.

---

*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

---

*A Text Book of Practical Therapeutics with Especial Reference to the Application of Remedial Measures to Disease and Their Employment Upon a Rational Basis*, by HOBART AMORY HARE, M.D., B.Sc. Tenth edition, enlarged, thoroughly revised and largely re-written. Illustrated with 113 engravings and four colored plates. Lea Bros. & Co., Philadelphia-P. Blakiston's Son & Co., Philadelphia, 1904.

Ten editions of this text book in fourteen years have been published. No better proof of its usefulness and popularity can be presented. The author's plan and object have met with the success they deserved from the first. That a new endeavor to maintain the reputation of the book has again been made, is evident. Not only the entire contents of this edition have been revised, but the entire book reset in new type. In the discussion of the treatment of diseases in Part IV, at every step the reader finds sound advice.

A physician who depends upon this book for guidance in treatment, and carries out the instructions he receives from the very first page, is bound to obtain good results in his practice, and, therefore, become more and more encouraged in his professional work.

The neat type stands out distinctly on a paper of good quality, the illustrations are finished and attractive.

Through and through it is as up-to-date and as readable a book as its subject will safely allow.

DUPAQUIER.

*Practical Dietetics With Reference to Diet in Disease*, by ALIDA FRANCES PATTEE. Second edition. Published by the author, New York City, 1904.

Probably no work on dietetics will fill a better place than this in the reference books of the trained nurse. The suggestions are liberal and



exact direction in the preparation of food for the sick is given. Of course, much of the information is extraneous to a nurse's function, but the author has evidently experienced the necessity of instructing the physician also, and the book fulfils, therefore, an additional purpose.

DYER.

*Text Book of Human Physiology, Including Histology and Microscopical Anatomy*, by DR. L. LANDOIS. Tenth revised and enlarged edition. Edited by DR. ALBERT P. BRUBAKER. Translated by DR. AUGUSTUS A. ESHNER. P. Blakiston's Sons & Co., Philadelphia, 1904.

Landois' Physiology ten years ago was standard with most teachers of this branch of medical and physical science, and Dr. Landois has gone on teaching ever since. The results are evident in this new edition, which is a superb presentation of the subject. Replete with nearly four hundred illustrations and with a text and subject especially for the student of medicine, this new edition must gain the same favor as its predecessors. No pains have been spared to make each division of the book complete, and the reader is compelled to follow a logical introduction of the subject and later a full exposition of its more complicated divisions. It is indeed a text of reference for the student whether he be already a doctor graduated or on the way.

DYER.

*Bacteriology and the Public Health*, by GEORGE NEWMAN, M.D., F.R.S.E., D.P.H. Third edition. P. Blakiston's Son & Co., Philadelphia, 1904.

A clear exposition of the history, characteristics, methods of study and application to practical ends, this work has been prepared for any intelligent reader. Chapters are devoted to the evolution of the present conception of microorganisms and their habits, and to the means and ways of studying these. Again there are pages discussing the evils of germ laden water, and infected foods, the methods of discovering these and the remedial measures. Polluted soil, animal infection, sewage as affecting fish food, are each fully discussed. Free and full illustration is employed and the text is as clear and graphic as the intelligent observation and definite knowledge of a scientific and careful author can make it. Almost every disease of germ origin affecting the public health finds a review, succinctly relating the main characteristics of the affection, the history of the genesis of the knowledge of its microorganism and the methods which have been, are, or should be employed for the public protection. Altogether this work is a most valuable contribution, not only to the practical laboratory specialist in the service of the public, but, as well, it is an addition to the wealth of information aimed at educating the public itself.

DYER.

*A Manual of Personal Hygiene. Proper Living Upon a Physiologic Basis*. By American authors. Edited by WALTER L. PYLE, A.M., M.D. Second edition, revised and enlarged. W. B. Saunders & Co., Philadelphia, New York and London, 1904.

The appearance of a second edition of this popular work in less than five years is an argument of its worth. No pains have been spared in making the revision complete, and some chapters have been entirely rewritten. Additional articles have been written, referring especially to hydrotherapy, domestic hygiene and on surgical accidents and emergencies. While the book is excellently arranged for the study of the medical man interested in the questions discussed, it is also so written that it may as well be read and followed in the household. The editor and his collaborators are to be congratulated upon the presentation of a practical book which must always find a useful place in the library of either doctor or layman.

DYER.

*How to Study Literature.* By BENJAMIN A. HEYDRICK, A.B. (Harv.). Third edition. Hinds and Noble, New York, 1904.

This little book aims at directing the reader of literature in the manner of appreciating the meaning of what he reads. It creates the desire of analysis of the motive, the diction and the style of the text read. It may be said that in its conciseness and exact presentation of the subject the little book fulfils its purposes in an unique way. DYER.

*Hand Book of Surgical Anatomy*, by G. A. WRIGHT, B.A., A.M.B. (Oxon), F.R.C.S., and C. H. PRESTON, M.D., B.S. (Lond.), F.R.C.S., L.D.S., (Eng.). P. Blakiston's Sons & Co., Philadelphia, 1904.

Although this little book of 200 pages is specially dedicated to the students of the Manchester (England) Medical School, we cannot refrain from endorsing the issuance of this manual and from recommending it to students in all English speaking Medical Colleges.

It is a systematic and pithy condensation of Surgical Anatomy. This work should also be welcomed by dental surgeons as "Dental Anatomy has received fuller treatment than is usual in books of this size, because medical and dental students receive much of their instruction together, and it is thought that so much dental knowledge as is here presented cannot but be useful to medical practitioners." LARUE.

*Clinical Lectures and Essays on Abdominal and Other Subjects*, by H. D. ROLLESTON, M.A., M.D. (Cantab.), F.R.C.P. P. Blakiston's Sons & Co., 1904.

This recent book consists of a compilation of a few clinical lectures and papers which appeared in various British Medical Journals, such as the *Lancet*, *British Medical Journal*, etc. It appeals mostly to the general practitioner, who will find therein some very interesting clinical reading. LARUE.

*A Laboratory Manual of Human Anatomy.* (Illustrated). By LEWELLYS F. BARKER, M.B., (Tor.). J. B. Lippincott Co., Philadelphia and London, 1904.

This work is, as its name truly implies, a laboratory manual with full guides and directions for the dissecting room. It will be mostly useful in the hands of those whose work is restricted to the anatomical laboratory. LARUE.

*Manual of Operative Surgery*, by JOHN FAIRBAIRN BINNIE, A.M., C.M. (Aberdeen). P. Blakiston's Sons & Co., Philadelphia, 1905.

We take pleasure in welcoming the appearance of this neat and very practical manual of Operative Surgery. It is compactly gotten up, with good print and 539 illustrations, quite a number of which are taken from standard authorities.

The book, as the author specifies, is written more as a guide to clinical and operative surgery than a hand book to cadaveric surgery.

We recommend this work to students of the higher grade and to medical practitioners as a portable and ready reference. LARUE.

*Anatomy.* By HENRY E. HALE, A.M., M.D. Lea Brothers & Co., Philadelphia and New York.

This little volume forms part of the Medical Epitome Series, edited by Dr. V. C. Pederson of the New York Polyclinic Medical School and Hospital. It is especially adapted to the use of medical students. Inter-spaced are some good illustrations, taken from such good works as Gray, Testut, etc.

The student will find a quiz part following each anatomical subject.

LARUE.

*In the Year 1800.* By SAMUEL W. KELLEY, M.D. The Saalfield Publishing Co., Chicago, Akron, New York, 1904.

This is Volume III, of "The Doctor's Recreation Series," edited by Charles Well Moulton. It is the best yet issued. It purports to be a history of Dr. Jonathan Brush, told by himself, beginning in the year 1800, when he was a practicing undergraduate, although his biography up to that time is related further on, and ending at the termination of his courtship. The scene is laid chiefly in Maine. The first years of the hero's life were passed in Massachusetts and the story ends in Philadelphia.

There is sufficient plot to make the book very interesting, a few dramatic situations being cleverly brought in, and it is one which is not put down without good reason, while always taken up with pleasure.

C. C.

## Publications Received.

**P. BLAKISTON'S SON & CO.,** Philadelphia, 1905.

*The Modern Mastoid Operation*, by Dr. Frederick Whiting.

*Medical Examination for Life Insurance*, by Dr. Chas. Lyman Greene. Second edition.

**LEA BROS. & CO.,** Philadelphia, and New York, 1905.

*Progressive Medicine.* Volume VII, No. 1. Hare-Landis.

**THE HERRICK BOOK AND STATIONERY CO.,** Denver, 1904.

*The Ophthalmic Year-Book.*

**F. A. DAVIS CO.,** Philadelphia, 1905.

*Studies in the Psychology of Sex*, by Havelock Ellis.

**J. B. LIPPINCOTT CO.,** Philadelphia and London, 1905.

*Gynecology*, by Dr. Henry J. Garrigues, A.M.

### MISCELLANEOUS.

*Report on the Origin and Spread of Typhoid Fever in United States Military Camps During the Spanish War of 1898.* Volume II. Maps and Charts, 1904.

*Fifth Annual Report of the Work of the Cancer Laboratory of the New York State Department of Health for the Year 1903-1904.*

## Reprints.

*The History of Pediatrics and Its Relation to Other Sciences and Arts*, by Dr. A. Jacobi.

*About Manikins: Why You should Have One.* American Thermo-Ware Co., New York.

*Blood Changes Produced by Ether Anesthesia in Both Man and Lower Animals*, by Drs. J. M. Anders and Napoleon Boston.

*The Treatment of Diphtheria with Antitoxin*, by Dr. Louis Fischer.

*Prosthetic Surgery with Report of Case*, by Dr. Flavel B. Tiffany.



## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)

FOR FEBRUARY, 1905.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	1	1	2
Intermittent Fever (Malarial Cachexia) .....	3	2	5
Small Pox.....		1	1
Measles.....			
Scarlet Fever.....	2		2
Whooping Cough.....		1	1
Diphtheria and Croup.....	4		4
Influenza.....	42	24	66
Cholera Nostras.....			
Pyemia and Septicemia .....	1	1	2
Tuberculosis.....	58	46	104
Cancer.....	10	3	13
Rheumatism and Gout.....	2		2
Diabetes .....	3		3
Alcoholism .....	1		1
Encephalitis and Meningitis.....	4		4
Locomotor Ataxia.....	3		3
Congestion, Hemorrhage and Softening of Brain.....	18	5	23
Paralysis .....	10	1	11
Convulsions of Infants .....	3		3
Other Diseases of Infancy .....	17	9	26
Tetanus.....	2	5	7
Other Nervous Diseases .....	1	2	3
Heart Diseases .....	52	23	75
Bronchitis .....	13	7	20
Pneumonia and Broncho-Pneumonia.....	53	41	94
Other Respiratory Diseases .....	3	5	8
Ulcer of Stomach.....			
Other Diseases of the Stomach .....	1	1	2
Diarrhea, Dysentery and Enteritis.....	13	4	17
Hernia, Intestinal Obstruction.....	1		1
Cirrhosis of Liver.....	6	1	7
Other Diseases of the Liver .....	4	1	5
Simple Peritonitis .....	2		2
Appendicitis.....		1	1
Bright's Disease .....	34	21	55
Other Genito-Urinary Diseases.....	2	2	4
Puerperal Diseases .....	5		5
Senile Debility.....	16	11	27
Suicide .....		2	2
Injuries.....	20	9	29
All Other Causes.....	20	8	28
<b>TOTAL .....</b>	<b>430</b>	<b>238</b>	<b>668</b>

Still-born Children—White, 21; colored, 15; total, 36.

Population of City (estimated)—White, 239,000; colored, 86,000; total, 325,000.

Death Rate per 1000 per annum for Month—White, 21.59; colored, 33.21; total, 24.66.

## METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure ..... 30.18  
Mean temperature ..... 49.  
Total precipitation .. 6.31 inches  
Prevailing direction of wind, northeast.



# *New Orleans Medical and Surgical Journal.*

---

VOL. LVII.

MAY, 1905.

No. 11

---

## Original Articles.

---

(No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints may be had at reasonable rates if a **Written** order for the same accompany the paper.)

---

### The Plasmodium Malariae outside the body of Man, and the Experiments, with Deductions.

By C. D. SIMMONS, M. D., Baton Rouge, La.

Most of our knowledge of malaria since the discovery of the plasmodium, by Laveran, has been through such indefatigable workers as Thayer and Councilman in this country; Ross in England; Marchiafava and Celli in Italy. Through them we have a most thorough knowledge of the wanderings of the plasmodium through man and the mosquito. Outside the body of man and the mosquito all is a sealed book, for we know practically nothing of the original host of this low land monster. It is not only a monster, but a giant, as it can fell the strongest man in a day.

During my stay of eleven years in the swamps of Ascension parish, I was in daily touch with perhaps every form of malaria known to man. Hemoglobinuria, and even the hemorrhagic type were quite common. I saw a large number of cases that were

extraordinary in symptom complex as well as fatality. I will give a history of three cases taken at random from my practice, for the reason that these cases impressed me very much at the time.

CASE 1—Mrs. B., *aet.*, 45, general health good, was taken at the noon hour with severe epigastric pain. I found the patient in agony and with normal temperature; no cause could be found for the pain. The patient was made comfortable by giving morphin and atropin by needle. I was called at the same hour on the following day, and found my patient practically in the same condition as I found her upon my first visit. I now made a diagnosis of malaria without reservation. Quinin given for a few days gave the happiest results.

CASE 2—A fine, healthy girl of 8 years old was taken with a chill at 11 a. m. I saw her at 1 p. m., and stated to her parents that she would not live more than thirty minutes. She died in just twenty minutes after my arrival. I do not know of any other microbic or parasitic disease that has proven as rapidly fatal as this. Cholera perhaps approaches nearer than any other. The only solution of this rapidly fatal case must be laid at the door of toxalbumens. The nerve centers were overpowered by this highly toxic substance as soon as it swept the field of the circulation. Such a death is enough to make the heart sick, even steeled as we are to the wildest death scenes.

CASE 3—Mr. T. L., *aet.* 38, general health good. I saw him shortly after his first chill, and gave an unfavorable prognosis. He had been troubled with one or two light attacks of malaria prior to my visit, but nothing severe enough to cause him to cease his farm work. The urine of my patient, which had been voided about an hour before I reached him, was of dark red color, and had coagulated into a nearly solid mass. I had considerable difficulty in getting the urine to enter the mouth of a quinin bottle. This specimen proved to be of the hemorrhagic type, as red blood corpuscles were found under the microscope. This was the last urine to enter the bladder, which fact was demonstrated by passing a catheter. Upon boiling, the urine was almost completely solidified; only a small portion of fluid, resembling blood serum, remained at the top of the test tube. The skin and conjunctivæ were almost of a grass green color. When standing upon the opposite side of the patient from the window a greenish reflection

was plainly visible on the pillows and sheets. My patient died in forty-eight hours after the onset of the trouble.

A phenomenon of unusual interest to me was the fact that many of the young farmers who seemed to be immune to malaria under ordinary circumstances, would invariably contract the disease very soon after beginning work in the forest, where it was their custom to go to procure timber, such as fencing for their farms. Their mode of living in the forests was not out of the ordinary. They returned to their homes at night, which in most instances were only about two miles distant. In one case, a healthy young farmer, descended from exceptionally healthy parentage, always came down with acute malarial infection in a few days after beginning work in the woods. In this case I was able to thoroughly follow out their way of living during their stay in the timber lands. His brother always accompanied him, and both of them dwelt under their father's roof. The people, as a rule, slept under a mosquito netting, as I was constantly urging them to protect themselves as far as possible from the bite of the mosquito. It was a habit of daily occurrence for the timber men to remove their shirts and to work in this nude condition for hours at a time, and exposing their bodies to the bite of myriads of mosquitos. I know of no other way to account for these outbreaks of malaria than the direct inoculation of my patients by mosquitoes far removed from the haunts of men. The question naturally arises, where did the mosquito get the plasmodium? The large and beautiful mosquito known as *Anopheles punctipennis* are very abundant throughout Ascension Parish. They are easily distinguished from other varieties by following the description given by L. O. Howard in his excellent work on the mosquito.

Several years before leaving the Parish of Ascension I equipped myself with a good microscope and all necessary staining material in order to study malaria in every possible way, and to this end I gave such time and talent as I possessed to the work, believing my field to be one of the finest in the world for malarial research.

Having satisfied myself, clinically at least, that man is often infected with malaria from mosquitos that had not previously fed upon his blood or any other human, I started a series of investigations to locate, if possible, the plasmodium outside the bodies of man and the mosquito. The intimate relations existing between

the dragon fly and the mosquito led me to examine the blood of a large number of these insects under the microscope. Upon two occasions I found large circular bodies which had an active internal motion. The central portion was somewhat darker than periphery, but no pigment granules could be made out. They were about the size of a white blood corpuscle. These bodies seemed to attract large numbers of little granules of dancing protoplasm. I next turned my attention to the blood of birds, using fresh specimens for examinations. In quite a number of the slides examined showed an organism identical with that of the plasmodium. It is interesting to note that nearly all of the malarial organisms found in bird's blood are of the flagellate variety. This is no doubt due to the higher temperature of birds' blood as compared with that of man. The rapid fall of temperature of birds' blood as soon as it is placed upon the slide must make it uncomfortable for the parasite, as the flagella become active in a few seconds. After studying the plasmodium in the blood of the avis as well as in that of the genus homo, I feel satisfied that nearly all full-grown forms of plasmodia have the power to use their flagella, and that they are not seen until five or ten minutes after human blood is placed upon the slide, makes it almost certain that the flagella are used in a struggle for oxygen or other substance necessary to the life of the organism. Upon one occasion while examining a fresh specimen of human blood, I had the good fortune to find a plasmodium of the flagellate variety in a perfectly clear field. The flagella was plainly visible and of gray color. The flagellate movements ceased in about five minutes and seemed to return to the body of the parasite.

It has occurred to me that birds may be at least one of the hosts of the malarial parasite. The young birds before they are feathered, and the old ones during the moulting season, have many vulnerable points in their armor where the mosquito can use his hypodermic needle to his satisfaction. As many of our swamp birds are migratory, and principally come from Central and South America during spring and summer, it is possible that some of our graver forms of malarial troubles are brought here in this way. Many of these birds and the *Anophele* mosquito are found together in the same swamps.



It is a well-known fact that birds, malaria and the mosquito follow swiftly upon the heels of the woodman and his ax.

It is with the hope that some young physician located in the lowlands of our State, with heart, head and hand attuned to this work, will become interested and pursue it until better results are attained than I have been able to accomplish, that this disjointed article has been written.

---

### Some Salient Points in the Morbid Psychology of Maniacal States.

By DR. E. M. HUMMEL.

Assistant Physician Louisiana State Insane Asylum, Jackson, La.

Formerly the term mania was used to designate any kind of "madness," and such is its popular application today. Even among medical men there is yet widespread misconception of what is meant by the word. As employed by the latest writers on insanity its meaning has become more confined. The condition properly called mania is an affection of the mind characterized by morbid exaltation of the emotional sphere, acceleration of the processes connected with the faculty of imagination, derangement of association, alteration of consciousness and psycho-motor restlessness (Hack Tuke). This paraphrase is definitive but scarcely descriptive. Nor do we care for descriptive details here. No two cases of mania are exactly alike, simply because a different personality is invaded in each instance; and what two personalities are the same? So have a number of varieties been recognized, made peculiar, it may be, by the exciting cause, behavior of the patient, degree of intensity, duration, or other qualifying circumstance. Further, maniacal symptoms may be merely a stage or feature in another variety of insanity. It is perhaps correct to say that the fundamental nature of many cases is overlooked when regarded as mania simply because of the prominence of such symptoms. True mania as a disease entire is a comparatively rare psychosis. Generally speaking, however, it may be proper to say that a patient is maniacal when such tendencies eclipse the other manifestations of his craze.

Very casual observation of a maniac will serve to discern the difference between his bent and conduct and that of a sane man. Put him beside a melancholic and his behavior is more

extravagant by contrast. In recurrent cases we have the opportunity of comparing the patient with his sane self. His every word and action bespeak exaltation of the emotional sphere, of impulse, lunacy, vivacity, animation there is a sufficiency—too much. His expressions are at once unrestrained, ill-timed, and untempered. He displays little or no reason, judgment, power of fixing the attention, association, logical deduction of effective control, because just now he has none of these powers. Apropos let us notice the natural status of some of the cerebral functions and their interdependent relations. It is an evolutionary law that a new—more recently acquired—function is usually feeble and labile—at least when compared with an older attribute of the same organism. The several appetites, the group of cerebral forces characterized as emotional or impulsive are very old nervous endowments. They are in some way or other common property of the higher vertebrates, especially the primates. Even primitive man must have been relatively more impulsive than rational. Obviously these were acquired very early in the evolutionary trend upward; and consequently we find the centers and tracts of their origin deeply organized and of great stability. Not so with the faculties of reason, judgment, logical cognition, association of ideas and their more abstract qualities of mind. These latter are pre-eminently the distinctive characteristics of man, especially civilized man. Such mental traits were more lately acquired. They form the superstructure resting upon the more primitive endowments. Perfection of these latter functions implies integrity of an infinitely complex maze of cells and fibres. When deleterious influences invade the cerebrum failure of some one of the intellectual faculties always makes the incipency of insanity, because the structures concerned with these refined functions present, in their delicacy and intricate adjustment, points of least resistance. A similar thing happens in degeneracy. The idiot or imbecile is found wanting most notably in those very faculties which disease elects to impair or destroy most readily. The behavior of a low-grade idiot so much resembles that of a creature further down the evolutionary scale that we are forcibly impressed with the atavistic harking backward of degenerate types. This effect is produced by the curtailing of the higher attributes in the order of their delicacy and refinement, the low and coarse being left to give complexion

to the defective individuality. In mania that state of things wherein the restraining powers of reason, judgment, etc., are put into abeyance, and the elementary emotional centers irritated, and their function exaggerated, not only exaggerated, but left neither directed nor inhibited, they take the field in wild confusion. Some writers, have with much aptness, called the condition *psyclampsia*, from its semblance to convulsive states. In a convulsion so utterly overwhelming is the deleterious agent that all the cerebral functions except the very crudest—the negative, and those of motion (centers for which are situated above the Rolandic fissure)—are wiped out temporarily. The low centers are in a state of irritation, as shown by the tonic and clonic spasms, etc. In epilepsy the convulsive seizures are not infrequently supplanted by ephemeral maniacal attacks which we must regard as vicarious in occurrence. The convulsive assault effects a deep and sudden reduction, but if this condition be carefully analyzed it will be found to differ from severe mania more in degree of intensity than otherwise.

There are other psychoses which yield maniacal symptoms, but in a somewhat different manner. A condition much akin to mania is that wherein the patient has sustained permanent lesions or defection of the high inhibitory faculties. They are commonly spoken of by those who have them in charge as excitable patients. Some of the so-called explosive neuroses come under the same head. In asylum practice this variety of patients constitute a class among themselves, and demand special management. As long as their environment is even and quiet they do very well, but let some disturbing incident that may concern them, be it ever so trifling, transpire, and there is sure to be a storm of excitement out of all proportion to the disturbing influence. The emotional centers in these patients are not in a state of morbid irritation. They respond inordinately to stimuli simply because their mental reins are broken or defective. Stable mentality demands ascendancy of the powers concerned with reason and association—effective play for the "battle of motives." We have to conceive of the elementary emotional centers emitting forces which at times strive for expression against rational repression. Properly inhibited their function is manifested in mental tonus or animation. Deviation from fitting counter-balance works detriment to the sane poise. (Similar arrangements are found regulating vital processes else-

where in nature—a kind of acceleration versus inhibition. The scheme affords great flexibility of adaptation.) The man who is capable of ever subordinating his emotional or passionate attributes to the most rational expression is sanest. An inordinate fit of passion is a compliment to no one.

Again, we sometimes encounter instances where there is for the time disproportionate development of the centers for some one of the appetites or lower cerebral functions (Wilson). Such a state of things frequently obtains in cases of adolescent insanity. The amorous ravings of the adolescent maniac bespeak erethism of the reproduction propensities, just at the time when these are being borne from latency to virility. The centers of sex have outstripped in development the other ganglia and assumed an undue importance. His brain state being what it is he acts as he does. Things sexual tincture all else in the patient's mental content. Sex is both the incentive and burden of his characteristic silly behavior. A great deal might be said regarding the normal psychology of adolescence from this point of view. Mania of this kind of causation might be termed sthenic—an important point to recognize, as it has a therapeutic significance. Sedative drugs have their rational use in these cases. By way of contrast to the type just cited we may point to the old man or convalescent who, because of impaired nutritive processes, suffers dissolution of his higher brain tracts. If some toxin be present to irritate the lower centers an attack of mania is precipitated. Apparently he seems excited, but most essentially his is an exhausted brain, he is asthenic; and we would, of course, have recourse to supporting measures.

---

### **Influenza; its Complications and Sequelae with Treatment.**

By B. O. LEBLANC, M. Ph., M. D.

Health Officer of Iberville Parish and Physician to the La. State Convict Farm,  
St. Gabriel, La.

Influenza is the most common disease that the physician has to deal with at this season of the year.

There is no disease, with the exception of dengue, which attacks indiscriminately so large a proportion of the inhabitants. This disease first came to our country during the winter of 1889-90, when the great pandemic started in Russia. It is supposed to be caused



by a bacillus, which Pfeiffer isolated in 1892; but not positively known to be caused by this bacillus; for attempts to develop an attack of influenza in man by inoculation with this bacillus have failed, and most laboratory animals as well have seemed to negative the claims for its specific influence. But whatever may be the cause, is of more interest to the bacteriologist. My observations were collected on 100 cases, forty of which were on the convict farm, and sixty in private practice. I saw it in all three forms that are described. Viz: 1. the respiratory form; 2. the nervous form; 3. the gastro-intestinal form.

By far the largest number of cases was of the respiratory form, the symptoms of which are a chill, or chilliness, with a rise of temperature  $100-103^{\circ}$ , severe pain in head, back and maybe in the chest, and sometimes in muscles of calves of legs, and a dry cough which generally lasts about thirty-six to forty-eight hours, when the cough loosens and the patient begins to expectorate, about the fourth or fifth day, often streaked with blood.

The fever declines now and the patient is convalescent fifth or sixth day. Blood occurs in about twenty per cent of respiratory cases. Saw two cases of the grippe lung, as described by Dr. John B. Elliott, Sr., in which there is dullness on percussion over whole lung from apex to base (it may be bilateral), with respirations only twenty to twenty-five per minute and no rales at all. Dr. Elliott says the seat of inflammation is in the intercellular spaces, hence no rales nor much embarrassed respiration. It is an influenza pneumonia as described by other authors. The next in frequency is the nervous form, in which I observed sudden onset of rigors, followed generally by fever, but not necessarily so, muscular soreness and aching, agonizing headache, equalled only by small-pox or dengue, vomiting sometimes. Great prostration and cardiac weakness. Patient usually complains of chilly sensation along the spine when moving in bed, and not being able to keep warm.

Only a few cases of the gastro-intestinal form occurred in my practice, the symptoms of which simulate an ordinary acute gastro-enteritis and might pass unrecognized except for its occurring during a grippe epidemic with other symptoms of the disease. The complications that occurred in my cases were severe bronchitis, delirium, pneumonia, and acute otitis media was very severe in one

case. Sequelæ, persistent headache, neuralgia, especially intercostal and supra-orbital. Two cases of supra-orbital were so painful that the patients had to be kept on opiates for two days. Depression of spirits, and enlargement of lymphatic glands also followed. One case developed acute pulmonary tuberculosis.

TREATMENT.—No specific treatment, but knowing that influenza is a depressing disease, my treatment consisted in stimulation and support of the system. I generally gave a light calomel purge, followed by a saline, quinin five grains every four hours and whiskey in liberal quantities, with a nourishing liquid diet. Most cases do very well on quinin and whiskey alone. As said above quinin has no specific action on the disease at all, nor has any other drug; but helps eradicate the existing malaria that most of us have in this climate, and renders the grippe milder. Symptoms were treated as they arose. Headache by antikamnia, five grains as needed, but always guarded by caffein or strychnin. After treatment consisted of elimination, for I believe as does Dr. A. B. Conklin, of Ambler, Pa., "that influenza is a toxemic disease." The early symptoms being caused by the bacilli and the after effects which take so long to wear off are caused by the toxins generated by the bacilli. Now if such be the case elimination is then the route to pursue. This is best done by the administration of alkalies. The salicylates may be used if properly guarded by stimulants. Always keep in mind that influenza is a very depressing disease, calling for stimulation. It is to be hoped that someone in the near future will prepare a serum treatment.

Certainly we cannot look for the development of a lymph, serum or anti-toxin, with curative or immunizing properties, until the causative influenza, of a definite micro-organism is clearly established, and hence, must be content to combat the symptoms of the disease as they present by purely empiric methods.

---

### **Beta-Naphtol in Uncinariasis.**

By E. M. DUPAQUIER, M. D. (Paris)

Professor of Clinical Therapeutics and Tropical Medicine, N. O. Polyclinic.

As a matter of fact, the first time the subject of uncinariasis made its reappearance in this community was in July, 1903 (NEW ORLEANS MEDICAL AND SURGICAL JOURNAL, Department of General Medicine, July, 1903. Abstract of Stiles's report.)

Tebault's article, the very first reference in local literature on this subject, had appeared in the same journal in 1889.

The Orleans Parish Medical Society and Charity Hospital's reports appeared one month after Stiles's report on Hookworm disease had been carefully abstracted by myself (July, 1903) and the Ashford-King paper on uncinariasis, read at the annual meeting of the Association Médica de Puerto Rico, in December, 1903, appeared in this journal in March and April, 1904.

This statement goes to show that I was interested in this subject from the first, because, with Stiles's report fresh in my mind, I happened, just at that time, to do some practice in one of our noted sand and pine districts, the soil for hookworms (Abita Springs). I had the occasion of treating cases of uncinariasic anemia as early as in June, 1903.

I was aware of the work going on in the city in July, 1903, and read the reports appearing, talked the matter over at the time and quite recently with those who were familiar with the subject, and I was impressed with two points which it is my object to present here:

1. In no instance (Ashford-King excepted) did any of those posted on the matter seem to attach much importance to the danger of using solvents with either thymol or male fern. Stiles, in his original report, distinctly warns not to use castor oil, or, for that matter, any kind of oils, with male fern, for fear of absorption, and, therefore, poisoning. This point appears in my abstract of his report.

Leman (October, 1903, NEW ORLEANS MEDICAL AND SURGERY JOURNAL), warns against the use of alcohol and nothing more.

Speaking from practical experience, alcohol and castor oil are the most commonly prescribed solvents, alcohol to dissolve the thymol and castor oil as the purge to take after the antithelmintics. While in all reports, many cases have taken these drugs with alcohol and oil without ill-effects, yet accidents have occurred and attention is called to this point of practice.

2. In no instance did any of those posted on the matter seem to know any other drug to be used in uncinariasis outside of thymol and male fern. There are a number of other drugs, but the one that surpasses them without exception is beta-napthol. Bently,

a year ago, this month, published an article on beta-naphthol which he had used in thousands of cases. (*Indian Med. Gaz.*, April, 1904—*Tropical Med.*, May, 1904).

I have used it in two cases with just as good results as with thymol and with no dread of upsetting my patients. It is easier to handle than both thymol and male fern, which is either inert or very poisonous as we find it in the shops. Of course, it is given in capsules, undissolved, just like thymol, except that only half the dose is necessary.

I thought it important to mention these two points given here, in cases that are now classed as routine cases.

Closing, I cannot but refer to the most important report on Anemia in Porto Rico (Commission authorized by Act of the Legislative Assembly, Porto Rico, February, 1904. Drs. Ashford-King-Igaravidez)—which is more authority than myself, on this subject of great local interest, and reproduce here for the benefit of my readers what is written, on page 112, in their report:

"Beta-naphthol is certainly a valuable drug in uncinariasis and bids fair to eclipse the other two. We have expelled over a thousand uncinariæ by a single dose and have obtained several cures from its use \* \* \* \*"

Says Bentley: "By this treatment I have been able to expel in a number of cases from 500 to 1000 worms." He calls attention to the price of this drug, which is one-tenth that of thymol.

"It appears that dizziness does occur from its use, but we have found it otherwise ideal as far as a vermifuge may be."

This discovery of Bentley marks one of the most important eras in the therapeutics on uncinariasis and beta-naphthol should be tried in preference to thymol until found less efficient." (Anemia in Porto Rico, English-Espanol. San Juan, Porto Rico, December 1, 1904.)



## Society Proceedings.

### Orleans Parish Medical Society.

*President*, DR. L. J. LEBEUF.

*Secretary*, DR. ALLAN EUSTIS.

141 Elk Place, New Orleans.

In charge of the Publication Committee, DR. ALLAN EUSTIS, Chairman,  
DRS. JULES LAZARD and H. DUPUY.

#### MEETING OF MARCH 11, 1905.

DR. F. W. PARHAM read a paper entitled:

#### **"A Case of Hysterical Arthralgia or Brodie's Joint."**

Mrs. S.—, *Aet.* 26. Admitted to Touro Infirmary during the night of December 29, 1904.

She was a married woman in good circumstances. She had been married eight years. During this time there had been eight conceptions, four eventuating in early abortion and four going on to full term. Of the four deliveries at term, one was of twins, so that five children had been born. Of these only one, a boy of seven years, survives.

Seven weeks before admission she suffered a miscarriage in the early months. She was in bed about three weeks, when she got the notion of making a fruit cake. She worked industriously at this until nearly midnight. Shortly after this she began to feel badly and developed a fever which continued until her admission.

About a week before her admission she had been much irritated by a dog in her room and got up and forcibly ejected him. In doing this, her husband thinks she struck her elbow, but Mrs. S. does not confirm this statement.

She came in during the night from the train after a ride of sixty miles. She complained bitterly of her right elbow and cried out when it was touched. Her temperature was 101 3-5. A lead and opium lotion was applied by the House Physician, and, at her request, I was notified on the morning of December 30, to see her.

I saw her about 9 a. m., December 30. I found a rather fleshy, fair-skinned young woman in apparently good condition. She was of remarkably amiable disposition and seemingly not disposed to

complain without cause. This first impression was subsequently confirmed as she became rather a favorite in the institution with the nurses and others who came into contact with her. She said her right arm, that is, the elbow, gave her continual pain and had done so for about a week, but she could not attribute it to anything that had happened. When I removed the dressing which had been applied during the night, I found the arm normal in appearance with the exception of slight swelling about the elbow on its posterior aspect. The slightest touch gave great pain, which was not especially intensified when the pressure was increased, but when any attempt was made to flex or extend the elbow she cried out as if in great pain. The lifting of the hand, even the slightest extension of the hand on the wrist seemed to cause excruciating suffering. Under the circumstances there seemed nothing to be done but to wrap up the arm in the lead lotion with a large pad of cotton and let it lie on a pillow in an almost prone position. A dose of morphine,  $\frac{1}{8}$  grain, was given by hypodermatic injection, as she seemed to be suffering so acutely. The prick of the needle, it was observed, seemed to cause an inordinate amount of pain, and this was noticed almost invariably afterwards whenever the needle was employed.

Her temperature was about 100 degrees, pulse about 100, respirations about normal. Vaginal examination in the bed revealed nothing noteworthy, except a slight discharge. Considering the history of abortion and the fever I was disposed to believe that the condition was essentially one of sepsis and that the elbow was the seat of a septic arthritis depending upon the action of one of the pus germs. A specimen of urine was ordered sent to the pathological department for examination.

During the day she refused nourishment, saying the odor made her vomit.

December 31, a. m. During the night complained much of her elbow and was much nauseated. Slept only about three hours altogether. Regarding the condition as one of puerperal sepsis, I asked Dr. Michinard to see her with me. He made a vaginal examination, which was unsatisfactory, owing to the difficulty in moving her. So we determined to put her under an anesthetic. This we did about noon in the operating room, gas and ether

being administered by means of a Bennett inhaler. Some retroversion of the uterus was found and a slight enlargement of the left tube, but nothing else. The uterus, however, was thoroughly curetted, irrigated and wiped out with gauze, a small drain being left in. The scrapings were sent in a sterile tube to the pathological department.

The report of urine sent the day before was as follows:

"Quantity of pus, large quantity of urates, uric acid crystals, a few red blood cells, squamous epithelium."

A specimen of blood, taken that morning, for leucocyte count showed a count of 13,000.

Jan. 1. A. M. The report of the pathologist showed the scrapings to be granulation tissue and the culture remained sterile.

Ever since the operation yesterday her stomach had been very irritable and she had slept little during the night. I, therefore, washed out her stomach through a stomach-tube using a hot bicarbonate of sodium solution. She fussed considerably during the operation and it seemed that little good was accomplished, as she frequently vomited during the day and moaned and complained greatly.

Jan. 2, 7 a. m. Has slept about four hours during the night. always nauseated on awakening, vomiting once. Nutritive enemata every four hours. Max. temperature (8 p. m.) 101, pulse 98, min. temperature 100, pulse 100.

Complained of arm.

A leucocyte count made to-day showed 20,000.

Jan. 4, 7 a. m. Bad night, very nervous, only slept after 1:30. Complained of cramps about umbilicus.

January 5. Refused nourishment. Didn't care to take enema. Had a fairly good night. Slept well and was not nauseated. But at 7 p. m. that evening nurse reported "Suffering agony." Temp. 102 2-5, Blood count 10,000.

From now on she seemed very miserable, often nauseated, refusing medicine and nourishment, sleeping badly, complaining greatly of arm. Salicylate of sodium, given to exclude rheumatism as a possible cause, had at first pronounced effect, but subsequently lost its power completely, although given in doses of 20 grains every two hours for a time. It was then discontinued. The blood was examined bacteriologically on January 8 and found sterile.

January 12. Vaginal discharge examined, found free from pus organisms.

January 22, 7 a. m. Bad night, dazed whenever awakening. Begged that the codein be not given.

7 p. m. Very bad day. Codein four times. Exceedingly nervous and suffering all day with arm. Temp. 100 3-5 at 8:55 a. m.

January 23, 7 a. m. Bad night. Slept well until midnight; after twelve no relief from pain in arm. 10 drops Battley's sedative at 12 and 1:30 a. m. Morphin 1-4 hypo. at 3 a. m. When awakened at 6 a. m. from restless sleep seemed delirious and insisted on getting out of bed.

January 23, 7 p. m. Extremely restless in forenoon and trying to get out of bed. Crying—complaining of arm—apparently delirious at 7 a. m., asked for coffee, but refused when brought. Had to keep her in bed. Pleading to get up and go home.

At 11:30 a. m. trying to get out of bed. Crying with pain in elbow. Complained of having to strain in urinating—some odor.

Matters had now come to such a pass that I felt constrained to do something decided. The immediate effect of the salicylate of sodium had been so pronounced that the condition resembled rheumatism greatly, but the relief had been only temporary and the complaint of pain was as great as ever, notwithstanding that the dose for a time was 20 grains of the salicylate from oil of winter-green every two hours. Opiates even gave only temporary and incomplete relief. Fixation of the arm and elbow was of little avail. Her apparent constant suffering, aggravated by the slightest touch on the arm or the gentlest manipulation of the fingers, the appearance of slight edema of the elbow and the failure of the salicylate to demonstrate rheumatism as a cause, seemed to indicate some serious inflammatory disturbance in bone or joint, not rheumatic in character. The most probable supposition was septic arthritis or osteomyelitis, but the sensitiveness covered such a wide area it was difficult to say what bone was involved. When the arm was uncovered, movement of the elbow caused apparently excruciating pain; pressure over the olecranon or over the condyles, especially the external, caused her to scream as if in the greatest pain. Along the outer side of the ulna there was slight pitting on pressure with the finger, and the elevation of temperature made a



diagnosis of inflammatory disturbance of some of the structures about the elbow possible, although some important signs of osteomyelitis or arthritis were lacking. Thus, there was really very little swelling, remarkably little, about the elbow, the contour of the limb seemed almost normal and the hypersensitiveness was best elicited by light pressure and pinching of the skin. Deep pressure did not perceptibly increase the suffering.

Then, too, the leucocyte count showed a fall instead of an increase.

December 31, 13,000. January 2, 20,000. January 5, 10,000.

The condition, then, was, as you may imagine, puzzling in the extreme, and yet, impressed as I was with the idea that sepsis was at the bottom of the trouble, I felt impelled to make an exploration about the elbow, to satisfy myself definitely. I, therefore, decided to take her into the operating room. This, I did; beginning the operation at 12:30, January 23, under ether. I made a longitudinal incision over the back of the elbow, crossed this with a transverse cut and dissected up the skin flaps holding them back with catch forceps. I penetrated the joint to the outer side of the olecranon exploring with grooved director and forceps, finding no pus or other evidence of infection. I, then, exposed the olecranon, but did not trephine, as there were no signs of involvement of that bone.

I exposed the external condyle and used a small trephine, but discovered no signs of osteomyelitis. I closed all this incision with chromic catgut, covered with a dressing, then exposed the humerus at its middle and entered the medullary cavity with a trephine. Some of the marrow was taken with a curette and sent in a culture tube to the pathologist. A drain was put into the humeral opening, the arm was dressed and put up with a posterior gypsum splint. She was returned to her room in an extremely noisy state after a hypodermatic injection of  $\frac{1}{4}$  grain morphin. During the examination under anesthetic, the movements of the arm, whilst somewhat restricted, were not indicative of any serious joint involvement.

2:45 p. m. Morphin  $\frac{1}{4}$  grain. 6 p. m.  $\frac{1}{4}$  grain.

7:55. Morphin  $\frac{1}{4}$  grain.

10:15. 102 2-5. Morphin  $\frac{1}{4}$  grain.

January 24, 4 A. M. Morphin  $\frac{1}{4}$  grain.

4:10 a. m. Temp. 103 (120).

10:15 a. m.  $\frac{1}{2}$  grain morphin, making 2 grains of morphin, hypodermatically, in 20 hours.

January 24, at 1 p. m. I walked in unexpectedly. I found her apparently in a state of grave coma with the eyeballs turned upward and breathing very irregularly, not more than twice a minute. I, at once, counted up that she had taken two grains of morphin in the twenty-two hours elapsing since the operation, and I felt more suspicious of this when I noticed the contracted state of her pupils, but, as I watched her for a few moments, I saw some suspicious movements about the eyelids and concluded that she might not be as unconscious as I had at first thought. I pressed firmly over the supraorbital nerve and at once got a response in some signs of returning consciousness. I, then, ordered some strong ammonia and held it on a piece of gauze under her nose; this, at once, aroused her and, in a few moments, she seemed perfectly rational, and I left her in a very composed frame of mind. This experience convinced me that the condition was largely, if not entirely, hysterical and I, therefore, asked Dr. Van Wart to see her with me.

Report of Dr. Weis of cultures taken at operation: "All Cultures remain sterile. No pus organism present."

January 24, 7 p. m. Exceedingly complaining all day.

At 10 o'clock last night passed urine at one time. None was passed after this until 3 p. m., January 24, when was drawn by catheter. High colored and offensive. Discharge from uterus.

Dr. Van Wart saw her with me at 6 p. m. and again at 10 a. m. next day.

#### EXAMINATION.

His very careful examination confirmed my suspicion and we determined to treat her by suggestion.

Ordered sterile water by hypo. when suffering.

January 25, 7 a. m. Slept four hours. Awakened each time with pain. Vomited copiously. Hypo. of water was given at 8:30—11 p. m., 12:30—2:55—3:30 a. m.

M. T. 104 3-5 (124), at 8:10 p. m.

Min. T. 101 2-5 (98), at 6 a. m.

7 p. m. Temperature at 8:10 a. m. 100 1-5 (102).

Very nervous and excited all day. Max. Temp. by rectum 100 1-5. Vomited copiously.

The new nurse took charge.

Ordered hypo. changed to water and strychnine, laying stress on the *advantage* of the change.

January 26, 7 p. m. Same plan continued.

Insisted on having her hair cut shorter to-day.

Has moaned all day and refused all nourishment.

January 27, 7 a. m. Much better night. Complained little of pain. Slept almost all night. No hypo. Capsule of strychnin occasionally.

7 p. m. Good day. Vomited.

January 28, 9:45 a. m. Arm dressed. Has begun again to eat.

January 29, 6:15 a. m. Castor oil. Raised in bed rest. Cried.

January 30. Temp. at 8 a. m. 100 2-5.

January 31. Was on bed rest  $3\frac{1}{4}$  hours. Not at all nervous.

February 1. Doing well.

February 2. Did not rest so well. Complained of arm.

February 3. Had a great deal of pain in arm during night of February 6. Sat up February 7 all afternoon.

February 10, a. m. Passed a fine night. Walked a little way to rolling chair.

Saturday, February 11. Removed plaster splint from arm.

For several days after this she was walking up and down the hall feeling remarkably well, eating well and sleeping well, although she still complained of great pain in the limb, not so much now in the elbow as in the wrist and forearm just above. Here a curious perversion of the sensation is manifested to the point of the pin and to heat and cold in test tubes. She showed marked diminution of common sensation with great retardation and could not distinguish the warm from the cold tube up nearly to the insertion of the deltoid. Pressure with the fingers just above the clavicle caused her to cry out with pain which she referred to the arm and forearm. None of these phenomena were developed on the opposite side. The conjunctival sensation in outer half of right eye was still manifested. The other reflexes were not tested at this time. She left for home on January 16 in excellent spirits. I have learned ten days ago she was still improving, though her arm still hurt her.

FROM BRODIE'S CLINICAL LECTURES ON THE VARIOUS FORMS OF LOCAL HYSTERICAL AFFECTIONS. (1847).—When he had only his hospital practice he “occasionally met with cases in which a particular joint was affected with pain, and a great degree of morbid sensibility, attended occasionally with some degree of tumefaction of the soft parts, although the characteristic symptoms of the ordinary diseases to which these organs are liable were wanting, and the usual consequences of abscess and destruction of the joint did not ensue.”

For a long time these cases occasioned him “great perplexity” and he did not “suspect the real origin of the symptoms” until he met with the following case:

A young lady complained of severe pain and a morbid tenderness of the knee, in the first instance attended with no perceptible enlargement of the joint. The best skill he commanded gave no relief. A slight tumefaction indeed occurred. This state had continued for a considerable time “when she was seized with a succession of violent paroxysms of hysteria, which terminated in an hysterical affection of the brain; so that she lay in a state approaching that of coma, with dilatation of the pupils of the eyes.” Whether the remedies employed did any good or not, she recovered of the last mentioned condition, “and from that time she never complained of her knee.”

Shortly thereafter a second young lady was brought to him suffering of what appeared to be a scrofulous disease of the wrist. The resemblance of this case to the other was so strong he doubted the correctness of this opinion. The doubts were confirmed by the occurrence of a succession of violent paroxysms of hysteria. Her recovery after the lapse of many days was followed by the complete disappearance of the local disease.

#### SIGNS OF THE AFFECTION.

HIP—Pain aggravated by pressure and motion, active or passive, and the patient often lies in one fixed position. The pain, however, is not confined to one part: it belongs to the whole limb. The patient often winces and often screams when you make pressure on the hip, but she does the same if you make pressure on the ilium, or on the side as high as the false ribs, on the thigh, or even on



the leg as low as the ankle, and everywhere the morbid sensibility is in the integuments.

Direct her attention to the examination, the pain is exaggerated; divert her and the former torture vanishes into air. There is no wasting of glutei and no flattened nates. The peculiar and frightful startings of the limb at night of actual joint disease are wanting and the frightful dreams do not occur. The pain will sometimes prevent the patient from falling asleep, but once asleep she may sleep soundly for many hours. This state of things may continue for weeks, months or years without leading to abscess or other serious consequences.

He says there is sometimes a general tumefaction of the whole limb due, he thinks, to turgescence of the small vessels or effusion into the cellular tissue. (I suppose of the former, as the parts do not pit, or remain indented after pressure.)

Although no wasting of the glutei, there may be deformity from posterior bulging and elevation of the pelvis, producing appearance of much shortening and a suspicion of actual dislocation of the hip. Indeed, it requires a careful examination to determine that all this strange distortion is but the result of the predominant action of certain muscles and the long continued maintenance of an unnatural position.

#### DIAGNOSIS.

It must be borne in mind that hysteria may co-exist with real organic disease; these are the cases that are especially puzzling. But every effort should be made to form a correct opinion of the case. The most important points are:

1st. The marked disproportion between the subjective and the objective phenomena.

2nd. The exaggerated degree of hyperesthesia, which is not confined to the region of the joint itself, and not materially increased by deep pressure.

3rd. The moderation of symptoms or their disappearance when the attention of the patient is diverted.

4th. The disappearance of even functional disturbances under anesthesia.

Edema sometimes occurs, but this is slight and does not increase.

Sir James Paget laid some stress on the absence of local surface

temperature, but this is not reliable, especially seeing that, as in my case, there may be actual fever.

The saying of Sir James Paget, "A joint which is cold by day and hot by night is not an inflamed joint," is worth bearing in mind. Further, the peculiar behavior of the alterations of sensation, whether hyperesthesia or anesthesia, are very remarkable and valuable from a diagnostic point of view. The transfer of hyperesthesia or anesthesia from one side to the other affected, for example, by means of a magnet or metals is certainly very peculiar. The behavior of the reflexes deserves study.

(In the paper I had gone into the subject more thoroughly, but the above abridgement has been made to conform to the time limit.)

#### DISCUSSION.

DR. VAN WART said that he had been called to see the case by Dr. Parham and when he had first seen her he had come to the conclusion that it was a case of hysteria. The affected arm was encased in a plaster of Paris case. Her facies was typical of a case of major hysteria. There was loss of corneal reflex on one side. The field of vision on both sides was contracted. Ankle clonus and patellar clonus were present in both sides. When he next saw her the cast had been removed from the arm and he was enabled to examine the sensation. There was diminished sensation to pain and touch over the deltoid region and over the elbow and wrist. She could distinguish between the hot and cold sensations in the left arm, but was unable to do so in the right arm. Regarding tenderness on pressure over the peripheral nerve as a diagnostic sign between peripheral neuritis and hysteria, he did not consider it of much value, as Oppenheim had found tenderness over the peripheral nerve in 200 cases of hysteria and neurasthenia examined with this point in view.

DR. CAZENAVETTE stated that the sensory phenomena were of paramount importance in making a differential diagnosis between hysteria and peripheral neuritis. In hysteria the hyperesthesia or anesthesia is uniformly distributed over the entire arm, or section of arm, while in a true neuritis the sensory distences are limited to the area of distribution of the affected nerve.

DR. DELAUP wished to know how the elevation in temperature could be explained by a diagnosis of hysteria.

DR. LEBEUF stated that he had delivered the patient reported by Dr. Parham of a living child, sometime since. She suffered so severely while in labor and the os was so rigid that it was necessary to chloroform her. After digital dilatation of the os, she delivered herself of a living child.

DR. J. F. OECHSNER wished to ask Dr. Parham whether there was not some doubt in his mind as to the patient having had hysteria. He then reported a case of a child in whom he had suspected osteomyelitis of the lower end of the femur. He made two openings in the bone, but was unable to find any pus and examination of the fluid obtained from the medullary cavity was sterile. Before the operation the leucocyte count was made and 14,000 leucocytes found. The patient improved for two or three days after the operation, when there was a recurrence of the pain, which persisted for two weeks and she gradually recovered. At present the child is fat and healthy and shows no evidence of having had either a tubercular osteomyelitis or a pyogenic osteomyelitis. He did not think that his patient was one of hysteria, but it was questionable what the exact condition was.

DR. VAN WART, speaking again, stated that the anesthesia of the affected arm in the case reported by Dr. Parham, was typical of hysteria, as described by Charcot and others, the areas of anesthesia extending in bands around the arm. He had examined the field of vision and found it contracted on both sides. Regarding the question asked by Dr. Delaup, it was a well known fact that cases of hysteria have been reported with a very high temperature, in one case 107 degrees F.

DR. PARHAM, in closing the discussion, stated that if Dr. Oechsner's case was like the case that he had reported, it was certainly a case of hysterical manifestation. One point which had not been brought out in the discussion was that under a general anesthetic a hysterical joint will show all movements, but a true inflammatory joint will be restricted in same. Further, the pain and tenderness were not confined to the immediate vicinity of the joint, but were almost as acute at a distance. The temperature in this case was never accounted for. While it is well known that fever may occur in hysterical affections, in this case it did serve to confuse and make the diagnosis more difficult.

DR. VAN WART read a paper entitled:

*"Reflexes of the Lower Extremities in Hysteria."* (Abstract.)—After calling attention to the reflexes found in the lower extremities under normal conditions and in organic diseases the abnormalities due to hysteria were briefly mentioned. A case was then reported in which a unilateral patellar clonus was elicited for a short time. A second case mentioned showed not only the presence of bilateral patellar clonus but also of a spurious ankle clonus. The third case was one showing multiple sclerosis combined with hysteria.

The following conclusions were drawn: (1). The disturbances of the reflexes in hysteria are transient while those of organic disease are permanent. (2). In organic disease they tend to vary from time to time but are never absent. (3). To reach a conclusion in a given case the patient must be subjected to repeated examinations.

#### DISCUSSION.

DR. CAZENAVETTE stated that Dr. Van Wart had covered practically all the points in his excellent paper, but that he wished to emphasize the fact that by repeated examinations of the different reflexes there will often be found a non-persistence of the reflexes as found in preceding examinations. In other words, in hysteria the reflexes are not constant. The presence of a patellar reflex with the persistent absence of a plantar reflex, should lead us to suspect hysteria.

DR. EUSTIS read a paper entitled

#### **"Report of two Cases of Volvulus of the Intestines, Complicating Typhoid Fever."**

In the management of a case of typhoid fever we are often too prone to overlook the possible dangers during the stage of convalescence and this is my excuse for reporting the two following cases which I saw within ten days of one another. None of the text books mention volvulus of the intestines as a possible or probable sequela of typhoid fever; nor have I been able to find any other reported cases in the literature on the subject, nor any record



of this complication in the postmortem records of the Charity Hospital. Undoubtedly many cases are seen which are mistaken for perforation or hemorrhage into the bowel. I frankly admit that the diagnosis in both of these cases was made at the post-mortem, while the first case would undoubtedly have been saved by laparotomy had we made the diagnosis prior to death. The symptoms of the condition closely simulate those of perforation, excepting that the leucocytosis in the former is not as high.

Regarding the frequency of volvulus from other causes we find that by far the majority of the cases are volvuli of the sygmoid flexure. Next in frequency is volvulus of the small intestines, which occurred in each of the cases cited below. Regarding the varieties of volvulus they may be simple or compound, the former being those cases in which the whole or part of the mesentery, with or without its attached intestine, undergoes half rotation or several rotations. A compound volvulus is formed when a piece of intestine, together with its mesentery, forms an axis, around which another loop of intestine, with its mesentery, undergoes rotation, sometimes forming a knot.

Conditions favoring the development of a volvulus is an abnormally long mesentery, usually congenital or from an old peritonitis with subsequent adhesion; or a narrowing at the root of the mesentery, thus favoring rotation. A localized paresis of the bowels will likewise favor the formation of a volvulus and further absence of mesentery in lower end of the intestines. Bearing these points in mind we can readily appreciate the ease with which a volvulus might develop in cases recovering from typhoid fever, on account of the localized peritonitis so often seen in this disease. As I stated before I have been unable to find a single reported case of volvulus following typhoid fever, although there are a number of cases reported following reduction of a hernia, peritonitis from other causes. Mayo Robson states that the condition occasionally occurs during an attack of colic from cholelithiasis and Treves further reports a case associated with lipoma of the mesentery.

In this brief paper I have not attempted to recite the detailed pathological anatomy, nor have I gone very deeply into the literature of the subject. I will content myself with a mere report of the two cases mentioned above in the hope that in the future those

who are present will bear in mind this possible danger until the patient is well on into convalescence. I mention this for the reason that Case I, after having passed through a very severe case of typhoid fever, had been presenting normal temperature in the morning for 15 days and nothing was further from my mind than death from volvulus, and I hope to save others the chagrin which I experienced on losing this patient.

Case 1. A. H., colored female, single, aged 22, was admitted to Ward 40 of the Charity Hospital June 23, 1903.

History taken at time of admission: Her mother and father are both living, at an advanced age, and in perfect health. One brother living, in good health.

Personal History: Good, the patient never having been seriously ill before the present illness. She denies any venereal infection and has escaped the common infectious diseases of childhood.

Two weeks prior to admission patient was taken ill with general malaise, occasional vomiting and pain in the head, with considerable abdominal pain, associated with fever. On admission patient was slightly emaciated, countenance dull, presenting a typical picture of infection by the bacillus typhosus. Abdomen distended, tympanitic and painful on palpation, but the pain is not localized. Lungs and heart normal. Spleen enlarged. Temperature 104.8 degrees, pulse 130, respiration 32. Patient's temperature ran the typical course of typhoid fever, ranging almost constantly above 104.6 degrees for two weeks, when it declined by lysis to normal. Widal's reaction made on day after admission positive. During the height of the disease, there was delirium and for a time complete coma, necessitating the administration of nourishment through the nares by means of a rubber catheter and funnel. The temperature was normal in the morning for 15 days, but, with a rise in the afternoon to 99 or 99.5 degrees. She was apparently convalescing rapidly, with no abdominal pain, the mental condition normal and with bowels moving freely once or twice a day, until the night of July 25 (one month after admission and 15 days since the temperature had gone down to 98.5 degrees). At this time she was seized with violent abdominal pains referred to the umbilicus, followed by violent and persistent vomiting, first of mucus and later of bile-stained fluid. At the time the initial attack of pain in the

abdomen, when seen by the interne in charge of the ward, she was in extreme collapse, with subnormal temperature and imperceptible pulse. I did not see her until 9 o'clock in the morning of July 26, when she was in extreme collapse, with cold, clammy skin, pulse imperceptible, temperature 97 degrees. Her facies were drawn, eyelids drooping and voice extremely weak. She was vomiting almost incessantly, while her stools were green, loose and offensive. Examination of the abdomen showed very little tympanites, but with rigid abdominal walls and palpation, extremely painful to the patient. No mass of any sort could be felt through the abdominal walls on account of their rigidity. A leucocyte count made at this time showed 15,000 leucocytes. She was stimulated freely, hot cans were applied to her body in an attempt to overcome the shock, but without success and she died within a few hours after I saw her without recovering from the collapse.

Treatment during the febrile stage of the disease, which is of little interest in connection with the case, consisted in the administration of one grain of thymol every four hours, liquid nourishment and appropriate stimulation while hyperpyrexia was combatted with cold sponging.

The body was claimed by relatives, but through the courtesy of Dr. J. M. Batchelor, House Surgeon of the Charity Hospital, I was enabled to have a partial autopsy performed by Dr. Couret. Assistant Pathologist of the Hospital, who reported as follows:

Autopsy No. 1682, held on July 27, 1903, at 12:30 p. m., on the body of A. H., from Ward 40, bed 543:

Body of colored female, aged 22, emaciated, postmortem rigidity marked, pupils dilated, sclera white. The body being claimed, the abdominal cavity only was opened by a median incision.

A volvulus was found about the middle of the jejunum. Intestines at this point intensely congested and almost gangrenous. The ileum presented ulcers of Peyer's patches from the ileocecal valve to 3 feet above this point. The intestines were matted down at the site of the volvulus. Some of the ulcerations of Peyer's patches had extended almost to the outer layer of the intestines.

Anatomical diagnosis—Typhoid Fever. Volvulus.

Case 2. C. J., colored female, aged 15, single, admitted to Ward 40 of the Charity Hospital July 22, 1903.

The patient was admitted in a delirious condition and no definite history could be obtained. Temperature was 103 degrees F., pulse 164, respirations 36. Examination of the lungs and heart showed these organs apparently normal. Urine examination showed the presence of bile but no other abnormalities. There was severe pain in the abdomen which persisted to death. Widal's reaction negative and no plasmodia malarix nor leucocytosis. Abdomen was moderately distended, tympanitic and extremely tender to pressure. The extreme prostration present on admission was overcome to some extent by stimulation until three days after admission, when she was seized with excruciating pain in the abdomen, with subnormal temperature. Constipation, which had persisted for several days after admission was followed by a severe diarrhea with offensive stools. Vomiting commenced immediately after the onset of pain in the abdomen, which soon became stercoraceous. Cold, clammy skin, imperceptible pulse, subnormal temperature and other symptoms of severe shock were also noted. She was stimulated freely, but she never fully rallied from the initial symptoms of shock, and died July 27, 1903.

The body was claimed by relatives, but again through the courtesies of the House Officers of the Hospital, I was enabled to obtain a partial autopsy.

A report of the autopsy, held by Dr. Pothier, Pathologist to the Charity Hospital, follows:

Autopsy No. 1684, on body of C. J., Ward 40, bed 548.

"Body of colored female, age 15, emaciated, pupils dilated, scleræ yellow, p. m. rigidity marked. Body claimed and only abdominal cavity opened by median incision.

Intestines congested and solitary follicles and a few Peyer's patches ulcerated. No perforations found. Intestines matted together with recent adhesions. Four feet above the ilio-cecal valve the adhesions formed a flexion about four inches in length, producing an obstruction at this site.

*Diagnosis*—Intestinal obstruction; acute general peritonitis; acute enteritis.

I was present at the autopsy, and there was distinct twisting of the involved intestines.

Before closing I take this opportunity of thanking Mr. Mahler,



Interne at the Hospital, who was assigned to Ward 40 at that time, for notes on the cases.

#### DISCUSSION.

DR. WEIS stated that he agreed with Dr. Eustis regarding the literature of the subject, as he had likewise been unable to find any similar cases reported. It is easy to appreciate how cases of typhoid may develop volvulus, for in all cases of protracted typhoid fever there is fibrinous exudate and this may later become fibrous. The two cases reported by Dr. Eustis were negroes and he wondered whether this was not a predisposing cause to the formation of volvulus. In the ape the mesentery is abnormally long. According to the Darwinian theory the negro is nearer the ape than the white man. He wished to know whether the doctor had observed whether or not the mesentery in these cases was abnormally long.

DR. PARHAM stated that in his opinion the second case showed symptoms indicating laparotomy for the relief of an obstruction and he pleaded for more general surgical interference in typhoid fever. The cases reported were, in his experience, unique, as he had never seen any similar.

DR. VAN WART remembered seeing a case when a student upon whom an enterostomy had been performed with the aid of a Murphy button. On the evening of the sixth day the patient was seized with vomiting and laparotomy revealed a volvulus of the entire small intestine. Patient died on the table during the second operation.

DR. EUSTIS, in closing the discussion, said that undoubtedly both patients could have been saved by surgical interference and he had urged such, but the surgeons in consultation considered that the patients were too severely shocked to stand laparotomy. He agreed with Dr. Parham that surgical measures are not resorted to often enough in this city in the abdominal complications of typhoid fever, but the fault lay with the surgeons more than with the physicians. Replying to Dr. Weis' question as to the length of the mesentery he had not observed it in the second case, but in the first case he had distinct recollection that the mesentery seemed longer than usual.

## REPORT OF CASES AND MEDICAL NEWS.

DR. LEBEUF stated that he had just returned from the City of Mexico, and he was struck by the splendid hospital which had just been completed in that city. It had been built at a cost of \$3,000,000, under the direct supervision of Dr. Liciaga, President Diaz's physician. He considered it was the finest hospital in the world, built on the pavilion plan, having 47 pavilions. There were special pavilions for hydrotherapy, electrotherapy and mechano-therapy, with trained men in charge of each department. Segregation of the infectious diseases is accomplished by seven buildings, separated from the remaining buildings by an eight-foot wall. Among the infectious diseases pneumonia and phthisis are classed and there is a separate building for each, with other buildings for yellow fever, smallpox, etc.

## MEETING OF MARCH 25, 1905.

DR. L. G. LEBEUF read a paper entitled

**"Two Cases of Trismus Nascentium Cured by Eserin Hypodermatically."**

I have been unfortunate enough to have seen a great deal of Tetanus of birth, due in part to a long practice in the country parishes and with the poor in our suburbs. I am afraid that I have lost every case I treated of the disease, and when I began a treatment which in the last year allowed me to save the last two cases I treated, I thought I would give the profession that experience.

CASE 1. Chas. Wilson—six days old—a white male child weighing seven pounds at birth. I had not been present at delivery, and reaching the bedside thirty-five minutes after the umbilical cord had been cut by a common negro nurse, with rusty scissors. Cord was treated with burnt rags at first dressing, until I came.

On sixth day child was taken with convulsions which lasted for three days. 1-150 of sulphate of eserine was used with 2 1-2 grains of bromide and 1 grain of chloral every three hours. This child is now twelve months old and weighs 18 pounds and perfectly well.

CASE 2. Was that of a child, a primipara of 32 years of age, where high forceps had been used with a great deal of force and

considerable injury and along line of fetal head. Artificial respiration was kept up in this case for two hours before a jerky, irregular respiration was established. Assisted by Dr. E. Denegre Martin. The first night 10 drops of Ducro's elixir was given by dropper, every hour. Next day, when child was doing fairly well, she went into violent convulsions, which lasted four days. The first twelve hours they were almost continuous. I first began treatment with the same dose of bromide of potash and chloral, by rectal enema and as he did not improve I injected child with 10 c. c. of anti-tetanic serum and continued with injections of 1-500 of a grain of salicylate of eserine, every four hours. This was kept up for two days until spasms became four and six hours apart, and then noticing on third day, when spasms were very slight and only every three or four hours, we noticed that the use of the needle always caused a slight tetanoid tonic spasm from each puncture. Thinking that this was from the trauma of the needle I discontinued this method and used the eserine afterwards by rectum and mouth.

The clinical notes of the second case are interesting and I want to give them as completely as possible:

January 3—Delivery at 2 p. m. Temperature 99 2-5.

January 4, 5:10 a. m. Antitoxin serum. Temperature 99 4-5.

6:35 a. m. Spasm. Bromide sod., chloral hydrate.

7:00 a. m. Spasm. Bromide sod., chloral hydrate.

7:20 a. m. Spasm.

7:30 a. m. Spasm.

7:50 a. m. Spasm.

8:10 p. m. Hypodermic Eserine Sol. 1-500.

8:30 p. m. Nourishment through rectum.

8:35 p. m. Spasm (hard).

8:45 p. m. Temperature 100 (rectum).

9:50 p. m. Nourished (rectum).

10:20 p. m. Spasm.

10:55 p. m. Spasm.

11:10 p. m. Medicine and Ducro's Elixir (rectum).

January 5, 1:00 a. m. Hypodermic Eserine Sol.

1:10 a. m. Nourishment (rectum).

1:15 a. m. Spasm.

2:45 a. m. Medicine and Ducro's Elixir (rectum).  
3:30 a. m. Nourishment (rectum).  
5:05 a. m. Nourishment (rectum).  
5:30 a. m. Hypodermic.  
5:45 a. m. Spasm.  
6:05 a. m. Temperature 100 2-5 (rectum).  
6:30 a. m. Nourishment, Ducro's Elixir (rectum).  
9:10 a. m. Nourishment (rectum).  
9:20 a. m. Hypodermic.  
9:45 a. m. Spasm.  
9:50 a. m. Nourishment through mouth.  
10:05 a. m. Medicine (rectum).  
10:55 a. m. Spasm (light).  
11:00 a. m. Nourishment through mouth.

January, 5, 1:35 p. m. Hypodermic.  
1:45 p. m. Nourishment (mouth).  
1:55 p. m. Spasm.  
2:35 p. m. Medicine and Ducro (rectum).  
4:45 p. m. Nourishment (mouth).  
5:50 p. m. Medicine and Nourishment (rectum).  
6:45 p. m. Nourishment (mouth).  
7:25 p. m. Spasms (very slight).  
8:05 p. m. Medicine and Nourishment (rectum).  
9:30 p. m. Nourishment (mouth).  
10:30 p. m. Spasm (very slight).  
10:50 p. m. Temperature 100 3-5.  
10:55 p. m. Bromide.  
11:50 p. m. Eserin and Nourishment (rectum).

January 6, 12:30 a. m. Nourishment (mouth).  
1:05 a. m. Bromide (mouth).  
1:30 a. m. Spasm.  
3:04 a. m. Eserin and Ducro (mouth).  
3:50 a. m. Spasm.  
4:05 a. m. Bromide.  
5:20 a. m. Nourishment (mouth).  
7:05 a. m. Eserin.  
7:45 a. m. Nourishment (mouth).  
8:55 a. m. Nourishment (mouth).



9:55 a. m. Spasm.  
10:45 a. m. Nourishment (mouth).  
11:30 a. m. Eserin.  
12:00 a. m. Bromide.  
2:05 p. m. Nourishment (mouth).  
3:00 p. m. Bromide.  
5:10 p. m. Nourishment.  
7:00 p. m. Eserin.  
7:30 p. m. Nourishment.  
9:30 p. m. Nourishment.  
10:45 p. m. Nourishment.

January 7, 12:25 a. m. Bromide.

4:45 a. m. Eserin.  
5:55 a. m. Bromide.  
10:55 a. m. Bromide.  
3:45 p. m. Bromide.  
9:10 p. m. Bromide.  
1:10 p. m. Bromide.

January 8, 4:10 a. m. Bromide.

#### DISCUSSION.

DR. GESSNER wished to know whether anyone had ever found the tetanus bacillus in these cases. Some years ago he had reported a case of trismus nascentium and Dr. Dupaquier at the time had stated that the disease was caused by meningeal irritation and not by the bacillus tetanis. Dr. Gessner then reported a case in which, after he had carefully dressed the cord, a sister-in-law of the mother had removed the sterile dressing and placed thereon a dirty scorched rag, with the development subsequently of the above named disease. There was a possibility in this case that the disease was caused by the tetanus bacillus, for the woman was the wife of a stable man. Since then the doctor had been in the habit of using a dressing of sterile absorbent cotton, which assisted in the dessication of the cord. There were two questions which he wished to put to Dr. LeBeuf; first, at what point had he injected the anti-tetanic serum; second, for what purpose did the gynecologist use eserine in his practice?

DR. MAGRUDER stated that his experience in obstetrical work tended to bear out the theory of umbilical infection in trismus

nascentium. He exercises care to see that all instruments and dressings coming in contact with the umbilical stump are thoroughly sterilized, and as a consequence the doctor has never had a case of trismus in his practice. In former years, when midwives used the dirty old linens and utensils, he frequently had to treat cases of trismus and invariably found a foul, suppurating umbilicus. Most midwives have now discarded this procedure and as a result he had not seen a single case of trismus for about four years.

DR. CHASSAIGNAC stated that the disease was very prevalent in Havana prior to the administration of that city by the Americans, but that since the American occupation, with improved hygienic conditions of the city, the death rate from this disease had decreased marvelously. He attributed this to the fact that packages of sterile gauze dressing were obtainable gratis at every drug store and believed that midwives and physicians were compelled by the Government to dress the cord of newborn children with these dressings.

DR. LEBEUF, in closing the discussion, stated that the injection of the anti-tetanic serum had been made in the lateral lumbar region. Regarding the use of eserine in gynecological practice, Dr. Craig, of Boston, had reported a number of cases of puerperal infection, puerperal eclampsia and other tetanic conditions, treated very favorably with this drug. The cord, in the first case, had been dressed by a midwife with the well known burnt rag. The doctor recommended small bands, put up aseptically by the different drug houses, for tying the cord, as there was less danger of their cutting through the umbilical vessel. He had used 1-500 of a grain of eserine sulphate by needle and 1-250 of a grain by the rectum.

DR. J. D. WEIS read a paper entitled

### **"Hanot's Disease, With Report of a Case."**

It has been generally conceded, and is widely taught, that a hypertrophic cirrhosis is the first stage of a later atrophic condition of the liver, and is not an entity in nosology.

It is due to the French School, and especially to Victor Hanot, that the form of hypertrophic cirrhosis, which bears his name, stands out from all other cirrhotoses of the liver as a complete unit, a true pathological condition with its own symptomatology and

pathological anatomy. Debove and Achard<sup>1</sup> make the statement that among all the cirrhoses of the liver, there is none which has, to the extent of Hanot's cirrhosis, a symptomatology, an evolution and a pathological anatomy which is always identical; in other words, whose clinical individuality is more precise.

Rolleston<sup>2</sup>, in his new book, says: "Although hypertrophic cirrhosis was recognized by Requin in 1846, by Todd in 1857, and by Hayem in 1876; it was not until Hanot, in 1876, sharply struck out the disease, in his thesis on Hypertrophic Cirrhosis with Chronic Jaundice, that it became an entity."

In 1893, Kiener<sup>3</sup> suggested that the disease be called Hanot's Disease, although Hanot<sup>4</sup>, himself, modestly named this condition Budd's Cirrhosis, for in 1856, G. Budd mentioned an enlargement of the liver due, as he supposed, to toxic causes arising in the intestines, and traveling up the portal veins to the liver.

Again, according to Vaughan<sup>5</sup>, it was the thesis of Hanot, in 1876, with the subsequent investigations of the same observer and his pupil, Schachmann, that has led to the recognition of a hypertrophic cirrhosis as a distinct disease, rather than simply a first stage in the atrophic form, and for this reason, this condition, or form, of Hepatitis is most commonly known as Hanot's Cirrhosis, just as the atrophic is known as Laennec's Cirrhosis. Later, Charcot divided cirrhosis of the liver into three groups:

1st. An insular, monolobular, intralobular and interlobular form of biliary origin—Hanot's Cirrhosis.

2nd. An annular multilobular, perilobular form of venous origin—Laennec's Cirrhosis.

3rd. A rare monocellular form, seen in congenital syphilis.

I shall speak only of the *hypertrophic biliary* cirrhosis, *i. e.*, Hanot's Disease.

My teacher, Prof. Reginald Fitz<sup>7</sup>, has objected to the term Cirrhosis, preferring Hepatitis, as an appellation for this condition. Surely in the hypertrophic forms, where probably the origin is infectious, Hepatitis, or inflammation of the liver, is a better word than Cirrhosis, a designation made upon appearance alone. Many observers, as Hawkins<sup>2</sup> and Pye Smith<sup>2</sup>, claim no real distinction between common, or portal, hypertrophic cirrhosis, and hypertrophic biliary cirrhosis, and do not agree that so

sharp a distinction between the forms should be drawn. The truth probably lies in the fact that cirrhosis, wherever it begins, will, after a time, spread and lead to changes of the nature of a mixed cirrhosis. Even in France, Dieulafoy, by formulating the picture of a mixed cirrhosis, has attempted to do full justice to the actual fact of the case. Rolleston<sup>2</sup> draws a comparison, and says, "No doubt, transitional forms do occur between the two types of cirrhosis, just as they do between arterio-sclerotic kidney (granular kidney), and chronic parenchymatous nephritis (large white kidney), and it would be incorrect to assume that they are different manifestations of one and the same process."

Genuine cases of hypertrophic biliary cirrhosis (Hanot's Disease) are distinctly rare. This contrasts with the frequency with which common, or portal, cirrhosis is met with.

Ethiology:—It is most common between the ages of 20 and 30 years, and is rare after 40 years, thus again contrasting with common cirrhosis, in which the average age is about 48. It is found oftener in men than in women (22 men and 4 women in 26 cases of Schachmann). A considerable number of cases is met with in young children. In childhood, however, it is indifferent to sex (4 girls and 3 boys in 7 cases of Gilbert & Fournier<sup>11</sup>). The disease, according to Rolleston<sup>2</sup>, is sometimes met with in several members of the same family, when exposed to the same conditions (2 cases in children of the same family, Jollye<sup>16</sup>).

Debove<sup>1</sup>, says, with some wit: "We have incriminated syphilis, tuberculosis, gallstones, malaria and alcohol." All of the above causes may enter into the etiology of other cirrhosis, but, most authors agree, not in Hanot's form of the disease.

Hanot's idea of the initial lesion being a catarrhal inflammation of the small bile ducts still holds ground. Such a lesion may originate from infection in the minutest canaliculi, and descend, after the manner of a cholangitis. In favor of the infectious origin, there is to be observed:

1—It begins frequently like a catarrhal jaundice, and secondarily becomes chronic.

2—It is essentially a febrile disease, with periods of remission and exacerbation.

3—It is accompanied by enlargement of the spleen and lymph glands, the glandular enlargement being not only of the portal



fissure at the hilus, but also of the mesenteric lymph glands. The enlargement of the spleen being similar to that of infectious diseases, rather than that of passive congestion.

4—The primary changes occur in the epithelium of the bile ducts, where the infection, if extending up from the intestines, would naturally first produce its pathological effect.

A view of ascending cholangitis beginning in the duodenum, where there is a local infection, is also offered. Rolleston compares this form of origin to broncho-pneumonia, following bronchitis of the larger tubes. Gilbert & Fournier<sup>11</sup>, according to Rolleston, regard it as an ascending infection from the intestine, due to infection from the colon group. Others of the French school hold the same view. Adami, quoted by Rolleston<sup>2</sup>, considers that a primary infection of the alimentary canal favors invasion of the liver by bacilli, which set up cirrhotic changes in that organ. Senator<sup>9</sup> also suggested the infectious origin of hypertrophic cirrhosis, the infection coming from the intestine by the bile ducts and through the blood and lymph vessels. Vaughan<sup>8</sup> supposes the infection to be generally from the intestines. McCasky, in discussing a paper by Musser, says he attaches great importance to primary diseases of the gastro-intestinal tract.

No doubt there are cases both of ascending and descending cholangitis. Hanot's original idea is possibly the most common mode of infection. The portal circulation seems improbable as an origin of this disease.

The only way in which it is possible to consider alcohol as an etiologic factor in Hanot's Disease is, that it may dispose to infection, by reducing the resistance of the general economy and of the alimentary canal and the liver in particular. Boix has recently, according to Rolleston<sup>2</sup>, suggested water as the mode of infection. Cold and damp houses favor the occurrence of the disease. Malaria seems to have no connection with Hanot's Disease, as do neither syphilis nor tuberculosis. Boinet<sup>6</sup> has observed it after typhoid fever.

Hanot<sup>5</sup> considers this form of cirrhosis as a sub-acute infectious hepatitis. Gaston<sup>12</sup> says: "Hanot's Disease is the perfect type of an infectious liver." We are, however, ignorant of the infectious agent, as no organism has been isolated and satisfactorily

established. Colon bacilli have been found in the liver by puncture in a case, quoted by Rolleston<sup>2</sup>, of Gilbert & Fournier. Hayem<sup>11</sup> found the pneumococcus. Parker Weber<sup>10</sup> describes a case i. e., obstruction in general, it may be observed that experiments performed by H. Mayer, J. Wickham Legg, Charcot & Gombault<sup>6</sup>, of the common bile duct. D. Nasse<sup>12</sup> succeeded in producing an artificial biliary cirrhosis in limited portions of rabbits' livers, by tying, not the ductus communis choledochus, as earlier experimenters had done, but single branches of the hepatic duct.

From numerous opinions as to the true pathology of this condition, Vaughan<sup>8</sup> gives three facts agreed upon by most observers:

First—According to Hanot, in true hypertrophic cirrhosis there are no destructive changes in the hepatic cells, i. e., the integrity of the parenchyma of the organ is an absolute characteristic of his hypertrophic cirrhosis. Heineche<sup>6</sup> states, "In the cirrhosis of Hanot, the hepatic cells remain intact, neither shrunken nor fatty, the nuclei are normal and stain well, indeed actual *proliferation* of these cells may be observed." Primary degeneration of hepatic cells is with certainty excluded in Hanot's Disease, indeed the first proliferation processes do not occur in the vicinity of the lobules, but in Glisson's capsule and in the region of the larger bile ducts, the hepatic cells, in most cases, remain unaltered, and this is so constantly the case that Hanot<sup>5</sup> and Schachmann insist that integrity of the parenchyma is an essential condition in hypertrophic cirrhosis with jaundice. However, because primary degeneration of the hepatic cells does not occur, is no guarantee that these cells always escape secondary effects. Conditions influencing the parenchyma may coexist with those resulting in hypertrophy, and, indeed, may affect the part most highly involved in the hypertrophic process, but when the parenchyma does undergo destructive changes, atrophy or, at least, a decrease of the hypertrophy must result. Such was unquestionably the conditions coming on last year in the patient under consideration.

Second—The primary changes in the development of Hanot's Disease occur in the epithelial cells of the bile ducts. On this point, there is some diversity of opinion, however. Certain observers have reported most extensive and destructive changes in the epithelium, while others have found evidence of pericholangitis,

with the epithelium of the ducts intact; but, when we remember that this disease may continue from one to eight or ten years before it causes death, and that during its course, it shows marked exacerbations and remissions, it is no longer a matter of surprise that the condition of the epithelium, in microscopic sections, is, by no means, constant. Hanot generally, not invariably, has found characteristic lesions in the bile ducts, with proliferation and desquamation of the epithelium, causing obliteration of the lumen. The fact that jaundice is one of the earliest manifestations of this disease, and that the symptom continues to the end, *pari passu* with the exacerbations and remissions, is strong proof of the early and constant involvement of the epithelium of the ducts in the inflammatory changes, because the jaundice is best explained by the occlusion of the ducts. On this point, Hanot remarks: "The lesions of the bile ducts, and their more or less extensive obliteration by the young proliferating cells, together with the chronic inflammation of the surrounding tissue by obstructing the flow of the bile, must be considered as the causes of the jaundice."

Heinecke adds: "Actual compression of the ducts, by contraction of the connective tissues, may occur in late stages of the disease."

Third—"The most obvious fact in explaining the infrequency of ascites in Hanot's Disease is, that the tissue about the branches of the portal vein largely escape involvement in this disease; or are affected only late in its course, as in my case, when, no doubt, the ascites was an expression of this change first existing."

Pathological Anatomy:—The liver is enlarged in all of its diameters, its weight is often doubled, sometimes tripled, weighing in some rare instances as much as nine or ten pounds. The surface, besides presenting traces of perihepatitis, is granular; this may be appreciated better by the finger than on inspection. The granular condition is due to the presence of islands of hepatic cells squeezed between bands of fibrous tissue. Adhesions to adjacent organs are frequently seen. The color is ordinarily dark reddish brown or deep green. As Debove<sup>1</sup> picturesquely puts it, fibrous plaques and hepatic islands lie as in a mosaïque, the former of a spinach green color, the latter of a pinkish gray or iron gray. This color picture varies with the proportion of bile pigment stain-

ing the organ. Such a liver is hard and firm, but elastic to the touch, even the finger nail cannot penetrate it easily.

The cut section shows the mosaïque of Debove, mottled with green and gray; bile and blood flow, on cutting the liver. The blood vessels and bile ducts appear normal. The gall bladder is also normal, occasionally, the walls are thickened, the mucous membrane being sometimes congested and velvety. The bile ducts are permeable. The bile is viscid and lighter than normal in color. In the hilus, the vessels and bile ducts show no change, often here enlarged lymph glands are present. The spleen is hypertrophied and shows a granular appearance on section, or it may be moist and soft as in the infectious diseases. The kidneys are generally large and bile stained. The pancreas is normal. Often traces of local peritonitis exist, and even general adhesive peritonitis binding the intestines together. Hematoma may be observed in this new formed tissue. Although Hanot<sup>5</sup> himself observes: "There is no notable lesion of the gastro-intestinal tract nor any inflammation of the mucous membrane about the ampoule of Vater," still such observers as Charcot, Debove and Gilbert point out cases which at autopsy showed marked thickening of the gastro-intestinal mucous membrane, especially where the lymphoid tissue normally exists, and the mesenteric lymph glands often show increase in size and are soft and grayish.

A microscopic examination of the liver will reveal bands of connective tissue forming isolated shreds or irregularly surrounding islands of hepatic cells. These bands may be broad with curving borders, surrounding numerous lobules or only one lobule (the insular, mono—or multilobular cirrhosis), much as may be seen in the normal pig's liver.

It is the fact of both monolobular and multilobular islands being observed which has caused some doubt as to the entity of Hanot's from common hypertrophic cirrhosis. The multilobular form must, however, be considered as the later stages of the monolobular form. Chauffard<sup>6</sup> offers a theory of the multilobular condition being splenogenous, i. e., due to continued toxemia manufactured in the diseased and infected spleen and transmitted to the liver by the portal vein, causing hypertrophic secondary cirrhosis upon the primary, if I may use the term, Hanotic liver.



The true Hanot liver shows a delicate fibrilla like connective tissue, branching even among individual liver cells, in contrast with the denser fibrous bands of the multilobular form. Flexner, quoted by Rolleston<sup>2</sup>, says "Elastic tissue fibres, derived from the sheathes of the hepatic artery, the portal vein, the bile ducts and Glisson's capsule anastomose with the connective tissue fibrillæ, invade the lobule and form a fine net-work between the cells." The remaining bile ducts show proliferation of their lining epithelium even to blocking the lumen of the ducts, i. e., biliary obstruction. Often plugs of inspissated bile are seen in the ducts which may be surrounded by fibrous bands. Around the margins of the lobule of the liver, in the interlobular connective tissue, are masses of small, deeply staining cells. These cells represent columns of cells, and are the so-called regenerated bile ducts or new bile ducts. Flexner believes they are not characteristic of Hanot's disease, but are to be found in other forms of cirrhosis. They differ from the normal bile ducts, in that they are lacking in elastic fibres, or a very imperfect development of an elastic covering may be found around them.

These new bile ducts are probably not bile ducts at all, and Rolleston<sup>2</sup> believes them to be the result of compensatory hyperplasia of the liver cells, and not as other observers claim, new bile ducts formed from old bile ducts, nor even pre-existing bile ducts brought into prominence, nor again, as others state, impressed liver cell masses, nor lastly, young liver cells. Liver cells, on the contrary, are very well preserved and do not show the changes of other cirrhotoses. One of the essential differences between all other cirrhotoses and Hanot's disease is pointed out by his pupil Schachmann, i. e., the condition of the hepatic cells, hypertrophied and hyperplastic in Hanot's disease, atrophied and degenerated in other cirrhotoses. Schachmann sees in the increased vitality of the hepatic cell, and, particularly, in its bile-forming function, the essential characteristic of Hanot's disease.

Rolleston<sup>2</sup> gives a relation between Hanot's disease and Banti's disease. (Chr. splenic anemia.) In chronic splenic anemia, a terminal multilobular cirrhosis may supervene, and is probably the result of poisons manufactured in the spleen; in Hanot's disease, the cirrhosis is essentially monolobular, but in the late stages,

multilobular cirrhosis probably of splenic origin, like in Banti's disease, may supervene.

I shall not speak of the histology of the other organs, as time and space do not admit and I have nothing to offer, my case not being a complete autopsy—I have studied the liver only.

Hanot's disease is characterized, from a clinical point of view, by a chronic jaundice with enlargement of the liver and spleen, the duration of which, five or six years, is interrupted by intermittent febrile exacerbations at variable intervals. During these exacerbations, the general condition deteriorates, the right side becomes painful, the color of the skin grows darker, and each exacerbation leaves, after the attack, a deeper jaundice and a larger liver and spleen. This condition, compatible for a long time with a remarkable conservation of strength and the digestive functions, terminates usually in a fatal cachexia.

I quote freely from Rolleston.—The onset of the disease is usually gradual, malaise, loss of strength, dyspepsia, and abdominal or hepatic pains may be first noticed before the jaundice appears. A physical examination now would reveal a large liver. Usually, the patient's first complaint, however, is jaundice. The onset of jaundice is usually imperceptible, but it may be sudden, accompanied with gastro-intestinal disturbances, resembling catarrhal jaundice, or may be accompanied by abnormal pain and some fever. The course of the disease is characteristically slow: often, for years, the general health is maintained in spite of the persistent jaundice. From time to time, attacks of abdominal pain with fever and increase of jaundice occur. Exacerbations like those of pernicious anemia and in Addison's disease, leave the patient in a deteriorated condition, both of the general health and nutrition. Later, the exacerbations become more frequent, the disease making steady, though slow, progress. Death may occur from intercurrent disease, from complete hepatic inaction, with its resulting toxemia, or, during one of the exacerbations, an acute degenerative change may develop an icterus gravis; such an end is in delirium and a typhoidal state.

Some of the principal and characteristic symptoms are the "bilious state," with, however, the unusual feature of diarrhea; hemorrhage from the intestines and epistaxis are often prominent

features; even hemophilia, probably due to the circulating bile, may exist. Hematemesis is uncommon. The abdomen is prominent and distended in the early stages, especially in the upper quadrant. Until late in the course of the disease, ascites is absent, or is present only a slight amount. Later, ascites may be considerable from development of secondary cirrhosis. The abdominal distension, however, which is present early and, more or less, throughout the disease, is independent of ascites. They may be little or no enlargement of the veins about the umbilicus; enlargement of the veins, however, may be present, even to the extent of a caput Medusæ.

I shall not go over all of the text-book physical signs, but simply touch upon the most important from a diagnostic standpoint.

A large, smooth, firm, uniformly enlarged liver, somewhat tender in the early stages, with persistent jaundice; a large spleen, larger than in common cirrhosis; hemorrhages; epistaxis; petechiae; bleeding from the intestines and gums; and, even hematuria. The patient is thin, with a prominent abdomen, clubbing of the fingers is often seen, and an apparent arthritis from extreme emaciation, i. e., prominent joints, may exist. A true arthritis has been described by Gilbert & Fournier and named by them biliary rheumatism.

The blood shows a secondary anemia. Three million and one-half to one million and one-half red blood cells in the cubic millimetre, with a hemoglobin below 1. Hayem<sup>12</sup> and Cabot<sup>13</sup> have shown exceptional cases with a high color index, but as Cabot<sup>13</sup> remarks: "In a blood containing bile, it is often difficult or impossible to estimate, with accuracy, the hemoglobin content." Leucocytosis may, or may not, exist. Hanot<sup>4</sup> asserts it to be present, but other observers have failed to record it. A constant Leucocytosis was present in my case. The urine contains bile, albumin and casts which are bile-stained. Rarely, albumin and casts may be absent. The treatment is symptomatic, tonic and nourishing; the drug of most benefit is calomel.

The prognosis is unfavorable. A cure of the fully developed disease has never been known to occur. A slow course is a relatively favorable one. "It seems, on its face, probable that the initial stages may be arrested, and recovery sometimes take place, though

this has so far never been determined by exact observation."<sup>2</sup> Ferrier and Delageniere<sup>14</sup> have drained the gall bladder, with good results, claiming ten cures. Greenough<sup>15</sup> had four cured cases by drainage of the gall bladder. Rolleston believes some of these reported cured cases may have been chronic infectious cholecystitis and cholangitis, but many appear to have been true Hanot. The drainage of the gall bladder was continued for periods varying from ten days to three months. In some instances, Rolleston affirms, the bile, which at first was infected, became aseptic. If drainage is to be undertaken, it would seem to be necessary to perform the operation early in the disease, to obtain the best results.

To come to the consideration of my case—I shall not give the tiresome detailed history, but only try to give a picture of the case in passing.

J. A., 28 years old, a white male, married, a native and resident of New Orleans, news agent, and the father of one healthy child. The family history is good and, therefore, negative. He was perfectly well and strong up to ten years ago, when he had typhoid fever, and six years ago he had what he called muscular rheumatism, i. e., vague general pains, with fever. He disclaims syphilis and gonorrhea entirely, and never was a drinker, taking claret only with his meals—never beer nor whiskey. He smokes cigarettes freely. Four years previous to October, 1904, he first noticed an enlargement of the abdomen, with slight pain in the right hypochondrium, followed by low fever for three weeks and an intense jaundice, which persisted. He had frequent hemorrhages from the bowels two years ago, sixteen in all, and later, epistaxis, with a tendency to bleed excessively, if he scratched or cut himself. The jaundice meanwhile persisted. He gave a good description of occasionally being ill with fever for three or four days and, sometimes, even for two or three weeks, with exacerbations of pain and jaundice. He suffered constantly from progressive loss of strength, dyspnoea and dizziness, the abdomen growing steadily larger, and was in and out of the Charity Hospital and Touro Infirmary. About one year back from last summer, while at the Touro Infirmary, the X-ray was used daily for three or four weeks, over the hepatic area with resulting extensive burn, from which he suffered great pain for over three months, when the



skin finally healed. He now first noticed more fulness of the abdomen and came to the Charity Hospital, where he was tapped for the first time. He measured forty-two inches around the waist before tapping. Later, August 4, 1904, he entered the hospital for the last time, complaining of weakness, large abdomen, jaundice, itching and shortness of breath. No pain. Emaciated and weak, he was put to bed and tapped, the tapping giving relief of the dyspnoea, but causing subsequent pain over the liver, probably from a perihepatitis.

On October 1, 1904, when I first saw him, through the courtesy of Dr. Guthrie, in whose ward he was and to whom I am indebted for the permission of studying and reporting the case, he was in bed in the last stages of emaciation, the abdomen tense with fluid, but not sensitive nor painful and the skin a rather deep yellow, but not brownish, rather surprisingly light in shade; he affirms he had been previously much darker. The sclera were only faintly yellowish. I shall refrain from the detailed physical examination, and give only the salient points. The abdomen measured thirty-nine inches in circumference; the lungs and heart were negative; on the whole, the general examination, beyond the abdomen, was relatively negative; prominent was the emaciation, the color of the skin and the large belly. After tapping and withdrawing four gallons of straw-colored fluid, the liver proved to be enormous, the edge being six inches below the ribs, the dullness from top to edge was a full twelve inches, the spleen was four fingers' breadth below the ribs, the arteries were soft. Between October 1st and December 3d, when the patient died of a fatal cachexia, he was tapped four times, with an average amount of three gallons of fluid withdrawn. There was an occasional temperature, ranging not higher than 100°. A daily blood count was made, showing a constant leucocytosis varying from thirty thousand to twenty thousand white cells to the cubic millimetre. Several red counts showed an average of one million, seven hundred and fifty thousand red cells to the cubic millimetre, and an average hemoglobin estimation of 35 per cent. The differential count of the blood was negative. The urine showed bile, with a large trace of albumin, bile stained hyaline, and granular casts, small round cells also bile stained, and an occasional blood globule;

the cells and blood globules were free and adherent to the casts. No fat. The specific gravity, 1,024. The urine was scanty in amount.

No autopsy being allowed, Professor Halsey was good enough to get a piece of the liver for me through the rectum. The liver was typical, in that it showed the beautiful green and gray mosaïque spoken of; it was smooth, though granular to the touch, and on sections small points stood out as described by the French authors. The section stained with eosin and hematoxylin showed well preserved islands of liver cells, often bile stained, however, with enormous perilobular bands of connective tissue, but also the delicate fibrillae and elastic fibre network between the hepatic cells and around the lobules. A monolobular and multilobular condition then with predominance of the monolobular type. The columns of regenerated bile ducts, so called, are to be seen, cells of elongated and oval nuclei arranged in groups within the fibrous perilobular bands. The bile ducts show marked proliferation of the lining epithelium, in places complete occlusion of the bile ducts can be observed while about the ducts, marked increase in the already accessive fibrous tissue is to be made out.

This case seems to me to be a typical one of Hanot's Disease, pure and uncomplicated up to ten months previous, when, after the X-ray treatment of some severity, a mixed condition supervened, with consequent ascites. How much the X-ray may be responsible for the fibrous proliferation and how much the infected spleen, I am not in a position to say. Certainly, the coincidence is interesting.

- 1.—Manuel de Med., Debove & Achard, Vol. 6, p. 109, Paris, 1895.
- 2.—H. D. Rolleston, Diseases of the Liver, 1905.
- 3.—Kiener, *La. Sem. Med.*, July 19th, 1893.
- 4.—Hanot, *Arch. Gen. de Med.*, Vol. 1, p. 3, 1899.
- 5.—Hanot, *Arch. Gen. de Med.* Vol. 2, p. 444, 1877. Hanot, *Arch. Gen. de Med.*, Vol. 1, p. 87, 1879.
- 6.—*Traité de Med.*, Charcot & Bouchard, Vol. 3, p. 862, Paris, 1892.
- 7.—Practice of Med., Wood & Fitz, 1897.
- 8.—Vaughan, *Jl. A. M. A.*, Vol. 37, p. 878, 1901.
- 9.—H. Senator, *Berl. Klin. Woch.* No. 51, 1893.
- 10.—Weber, *Br. Med. Jl.*, Vol. 1, p. 1027, 1896.
- 11.—*Prac. de Med.* Brouardel & Gilbert, Vol. 5, p. 343, Paris, 1898.
- 12.—Quincke & Hoppe-Seyler, Nothnagel's Encycl., p. 718, Am. Ed., 1903.
- 13.—R. C. Cabot, Clin. Exam. of Blood, 1904.

- 14.—Ferrier (Quoted by Rolleston), *Rev. de Chirurg.*, Vol. 12, p. 553, 1892.  
15.—Greenough (Quoted by Rolleston), *Am. Jl. of Med. Sc.*, Vol. 124, p. 979, Dec., 1902.  
16.—F. W. Jollye, *Br. Med. Jl.*, April 23, 1892.

## DISCUSSION.

DR. GUTHRIE, in opening the discussion, said that he had seen the patient mentioned in Dr. Weis's paper at the time of his previous admission to Charity Hospital. At this time the abdomen was markedly pigmented as the result of the X-ray burn. The patient at this time was fairly comfortable—able to walk about the ward. The liver was somewhat smaller than on the occasion of his last admission; but the growth during the last year was not extensive.

He believed that the most valuable point that Dr. Weis had made in his paper was in emphasizing the fact that in Hanot's disease we have an altogether different pathological condition from that observed in any so-called atrophic cirrhosis. He had come into contact with not a few who regarded hypertrophic (biliary) cirrhosis as a stage of the atrophic. This error is only possible if one loses sight of the pathology of the disease. It is beyond a doubt that often, as in the very case reported, we may have a mixed cirrhosis—one involving not only the biliary radicles, but the portal radicles as well. Indeed it would be difficult to conceive of a case lasting as long as this one which had not acquired the mixed type, considering the close anatomical juxtaposition in the liver of the bile radicles and the radicles of the portal vein.

Dr. Guthrie believed that Dr. Weis had put an undeserved imputation upon the X-rays, when he suggests that the therapeutic use of this agent might have been the cause of interference with the portal circulation. He had himself seen too many fibrous growths in the skin melt away under X-rays to believe that the same agent that, for example, would cause the absorption of a keloid, would in a deeply seated organ like the liver cause a connective tissue hyperplasia.

DR. F. H. WATSON stated that when in Baltimore he had seen two cases of Hanot's disease in the service of Dr. Osler. He reported one case as follows:

A boy of 18 years was admitted to the Hospital complaining of jaundice.

Family History—Negative; no similar trouble in family.

Personal History—Negative; no alcohol, syphilis.

Present Illness—Began 1½ years previously with malaise, gastro-intestinal disturbances, jaundice, the latter not clearing up in the usual six weeks—as is the case in catarrhal jaundice—but, on the contrary, became progressively darker. Since onset he has had several attacks of slight fever, associated with malaise and some pain in upper abdomen. There have been no hemorrhages from the mucous surfaces. The present trouble has interfered little with his work.

On Examination—Very well nourished youth—of a dark olive green color—does not look ill.

Thorax—Negative.

Abdomen—Slight fulness—no bulging of flanks—walls are everywhere soft, no tenderness. *Liver* is greatly enlarged, beginning above at V Rib, extending down to a point 15.0 c.m. below costal margin. Edge is hard, sharp and quite tender. *Spleen* is much enlarged, edge felt 15.0 c.m. below costal margin. No ascitis present. No signs of portal obstruction.

Extremities—Hemorrhagic spots over legs.

This, then, is a case presenting the characteristics of Hanot's disease. Cirrhosis of the liver running a chronic course, accompanied by jaundice of long standing; enlargement of the liver and spleen. Occasional gastro intestinal upsets with pain along right costal margin. Absence of ascites and signs of portal obstruction, and lastly, remarkably good condition of the patient.

Pathologically these cases unfortunately do not present characteristic changes in the liver. There is nothing in the pathological picture absolutely diagnostic. The diagnosis is made on the history and clinical findings.

DR. CHASSAIGNAC stated that there was one point which interested him especially in the paper of Dr. Weis, and that was the question of the occlusion or non-occlusion of the large bile ducts. Dr. Weis had brought out the fact that authorities differed on this point. If he remembered right, according to Hanot, the ducts are not apt to be occluded. The stools containing bile would tend to show that the ducts are partly open.

DR. J. F. OECHSNER was very much interested in the pathology



of the condition so ably related by Dr. Weis, but he thought that the diagnosis was of the greatest importance to the average practitioner. He then reported a case of a boy four years of age who presented an enlarged liver, which extended as far as the umbilicus and a palpably enlarged spleen. This case was evidently of malarial origin, for when put on quinin and increasing doses of arsenic, the liver diminished slightly in size, but not as much as he had hoped from the treatment. He requested that Dr. Weis bring out the essential points in the differential diagnosis of Hanot's disease.

DR. GESSNER referred to the beneficial results of ammonium chloride in 15 grain doses three times a day in incipient enlargement of the liver.

DR. ALLEN wished to know the technic of procuring sections by the rectum.

DR. WEIS, in closing the discussion, in answer to Dr. Guthrie, said he wished to state he did not mean to insinuate anything derogatory to the X-ray treatment. He agreed with Dr. Watson that the pathology of this condition is not precise, but one point of great importance is the presence of the liver cells intact and undegenerated. Regarding the occlusion of the bile ducts referred to by Dr. Chassaignac, there is always a certain amount of bile in the feces, so that probably the occlusion was only in parts of the liver. The disease has been produced experimentally by tying certain of the bile ducts. Regarding the differential diagnosis important points to be remembered were, first, jaundice that never leaves, but deepens daily, with absence of plasmodium malariae in the blood; second, leucocytosis. Malaria never produces a leucocytosis while it is almost invariably present in Hanot's disease. Third, the exacerbations, with increasing jaundice following each exacerbation. Fourth, the absence of ascites in the early stages. Syphilitic cirrhosis of the liver takes two forms, the gummatous and the fibrous, the latter condition showing morbid degeneration of the liver cells in microscopic sections.

DR. PERKINS wished to call attention to the fact that in abscess of the liver there is often increasing jaundice and leucocytosis.

## RELATION OF CASES AND MEDICAL NEWS.

DR. PERKINS wished to arouse the enthusiasm of the surgical members on the subject of pin grafting. Pin grafts will take on cases not necessarily aseptic and he related having planted 120 pin grafts in the last week on a slow healing granulating surface.

# N. O. Medical and Surgical Journal

---

## Editorial Department.

---

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

---

---

### The New Tulane.

With the inauguration of the new president of Tulane, Dr. E. B. Craighead, the effort has been started at creating some interest in the general public so far as this institution is concerned. For a number of years the entire field of the University has advanced in its standards and in the opportunities offered to the students of the South. This has been hardly commensurate with the funds at the disposal of those in charge.

It is true that the female department has been highly endowed, and that recently the Medical Department has acquired a large sum for the improvement of this division of the University. The College Department in the meantime has suffered the lack of adequate income, and even with the efforts of a few years since among the Alumni, little advance has been made in this particular.

Now a definite organization has eventuated interesting any citizen who is willing to contribute the sum of \$10.00, or more, per annum. The "Tulane Club" is being organized among all classes of citizens with the idea of creating a commendable interest in Tulane. There is no doubt that with such support Tulane will take its rank with the leading institutions of learning in the country.

When the four years' standard course was applied in the Medical Department we prophesied it was only a question of time when the improved facilities and requirements for graduation were enforced that the number of students would materially increase. This is exemplified this present year, as this Department shows a register of 496 students. With the opportunity of raising the standard in the college and with funds to maintain this every Department of the University can be put upon a plane of scholarship second to none in the country.

### **Politics in Health Matters.**

It is rumored that the office of President of the Board of Health of the City of New Orleans is being busily electioneered by the politicians.

It is bad enough that every public medical institution under State direction should depend on political patronage, but when the health of a great city is disposed of by the machine, it seems time to cry a halt.

This rumor may be only a vanishing wind and we hope that the New Orleans City Council may exercise a reasonable intelligence in reviewing the work of the incumbent City Board of Health before they try new and raw hands. New Orleans has grown into a healthy city and in all lines of public hygiene and health protection the present board has worked for a good end. The present head of the City Board of Health enjoys the confidence of the local profession in City and State and he has, moreover, realized no little reputation from other quarters. His personal efforts directed at the mosquito problem, meat inspection, general sanitation, reporting of diseases, etc., have deserved a natural confidence reposed in him.

Such offices are not dependent upon the weathercock and the public itself is entitled to a further administration of this part of its body politic under a regime of intelligence and earnest effort such as have characterized it now some years already.

### **The A. M. A. Meeting at Portland.**

Unusual features are proclaimed for the Portland meeting, which is to take place from July 11 to 14. Besides the interesting sessions of the Association, arrangements are made for trips to Alaska, Hawaii and even to the Orient. Special trains will go from Nashville, Chicago and other points and the beautiful scenery and picturesque country must attract a large number of the profession.

For so many years the A. M. A. has been identified with the Eastern States, the Middle West, and the Northern States that it is quite becoming that the far West should now be interested as was the South in the New Orleans meeting.

No such opportunity under like conditions will be afforded soon again to the Southern members of the A. M. A., and a large con-



tingent should go from the Southern States to the Portland meeting.

Just now many matters of general interest and welfare of the profession are rife and the Portland meeting should do much along several lines of advance.

Last year a strong effort was made to open up membership in the Association for drug manufacturers—while just now the tendency is to investigate the very candidates along other lines.

National legislation for the profession's good is conceived and once a start is made there are many things which the Association may accomplish for the general good.

The Portland meeting should be a success, and we trust that our own following will go in numbers to swell the interest and to make the representation which our section should have.

### Come to the Meeting.

Members of the Louisiana State Medical Society will still have time enough, after the receipt of this JOURNAL, to arrange for attendance at the 1905 meeting on May 9, 10 and 11. Those who may be undecided should settle it at once. It is an opportunity for a trip to New Orleans at a little over half the usual cost. The season is pleasant. Entertainment will be provided. Each one is apt to have some business to attend to, a book or an instrument to buy, something to do "when I go to the City." Over and above all, attending the meeting is a duty—a duty to self, to the profession, to the public. Do your duty, brethren, and come.

---

## Abstracts, Extracts and Miscellany.

---

### Department of Surgery.

In charge DR. F. W. PARHAM and DR. F. A. LARUE.

---

CICATRICAL STENOSIS OF THE INTESTINE OF TUBERCULAR ORIGIN.  
—Mr. Gangolphe presented before the *Société de Chirurgie* of Lyons (January 5, 1905), a woman who had been operated for a tubercular stricture of the small intestine by entero-anastomosis.

The onset of the trouble which, dating several years previous, had been rather sudden, was accompanied by intense colic, vomiting and fever. On admission, the patient was emaciated and pale, but quite calm. Palpation revealed a slight localized tympanites with supra-umbilical splashing, as found with pyloric stenosis, suggesting that diagnosis.

Closer inspection, during an attack, altered the diagnosis to intestinal stenosis. Laparotomy disclosed an intact pylorus and absence of gastric dilatation; a portion of the small intestine was extremely dilated, with collapse of the cecum and colon. An intrinsic intestinal stricture, admitting a No. 20 sound, was causing the trouble. The strictured region was 2-5 of an inch; the afferent coil of gut was the size of the forearm, being more thickened than distended. No ascites, tubercles nor adhesions.

The case was one of intestinal stricture, of probable tubercular origin, with recovery. Mr. Gangolphe then performed lateral anastomosis of the upper and lower segment of bowel, at about 4 inches from the stricture, preferring this to resection. The operation proved successful, pain having entirely ceased with the free passage of gas and feces. The recovery will undoubtedly be permanent, as the initial lesions are completely cured.

ACUTE PANCREATITIS; NECROSIS; RETRO-PERITONEAL SUPPURATION; OPERATION; RECOVERY. (*La Presse Médicale*, January 7, 1905). Mr. M. V. Schneider, at a surgical meeting held in Berlin, related the case of a woman at 43 years, a pronounced lithemic, who, after an attack of epigastric pain with vomiting, constipation, etc., had high fever with the formation of a left lumbo-abdominal abscess. Aspiration showed the presence of whitish, odorless pus.

Mr. Schneider, thereupon, made a free lumbar incision, which laid bare a suppurating cavity from the left kidney to the vertebral column, separated anteriorly from the bowels by a thick barrier of exudates and extending down along the ureter into the pelvis.

There escaped with the pus a long shred of broken-down tissue, which proved microscopically to be, remnants of pancreatic acini; similar debris were ultimately eliminated.

The patient recovered rapidly enough in two and a half months after having had a temporary fecal fistula, due probably to partial gangrene of the transverse or descending colon.

At no time was pancreatic juice excreted through the lumbar fistula; nor was sugar found in the urine. Only 18 months after the operation did a transitory glycosuria appear.

Two years and two months have elapsed since the operation; her general condition is good, although for the past year she occasionally has drawing and cramping pains in the epigastrium and left hypochondrium, which can be attributed either to perigastric and intestinal adhesions, or perhaps, to a condition of chronic pancreatitis. No tumefaction is felt in the pancreatic region.

Mr. Schneider thinks that the acute pancreatitis was etiologically connected with the biliary lithiasis, of which she showed unmistakable evidence.

A CASE OF VOLVULUS.—Mr. Mohring brought before this same surgical meeting a woman, Aet. 72 years, who had recently undergone laparotomy for intestinal occlusion.

On opening the abdomen, the whole bowel was found greatly distended, with much turbid serum in the cavity.

After breaking up all adhesions and elevating the intestinal mass from abdomen, the cause of the occlusion was seen to be due to torsion of the mesentery from right to left at  $180^{\circ}$ ; the colon itself was so involved that the cecum and the appendix rested near the spleen.

The untwisting of the mesentery was immediately followed by a collapsing of the gut, facilitating its replacement; recovery was uncomplicated.—*Ibid.*

ISOLATED SUBCUTANEOUS RUPTURE OF THE PANCREAS.—Mr. M. V. Schneider (*Ibid.*), reported the case of a young man, Aet. 18 years, who, after a traumatism of the epigastrium, presented all signs of a deep abdominal contusion with internal hemorrhage.

Mr. Schneider intervened 64 hours after trauma, making a median epigastric incision, united by a right transverse one; at once there flowed from the right hypochondrium a large quantity of fluid blood with clots. On tearing through, with the fingers, the gastro-hepatic omentum infiltrated with blood, he entered a large cavity, behind the stomach, likewise filled with fluid blood and clots, extending under the liver from the spine to the right kidney.

The cavity emptied and cleansed, Mr. Schneider searched for the bleeding point. The closest scrutiny failed to reveal any gastric

or hepatic wound. The head of the pancreas, however, was the seat of a wide tear, with contused borders. On removing its covering of fibrous clot there flowed a clear, ropy and blood-stained liquid.

The wound was closed by a deep stitch, readily controlling the hemorrhage.

Packing and drainage. Death ensued in 48 hours from general peritonitis. The autopsy confirmed the absence of any save the pancreatic wound. Mr. Schneider believes that this is the first recorded case of isolated subcutaneous rupture of the pancreas.

---

## Department of Obstetrics and Gynecology.

---

In charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER, New Orleans

---

TREATMENT OF PATHOLOGIC FACE AND BROW PRESENTATIONS.—The following directions are recommended by Dr. J. B. de Lee (*Chicago Medical Recorder*) as a result of a study of twenty-one cases.

1. With normal pelvis and normal child, with the chin anterior, watchful expectancy.

2. Normal pelvis, normal child, chin posterior, at first expectancy; when the chin shows any tendency to rotate to the front manual correction to occipital presentation; failing in this podalic version.

3. Normal pelvis and child, face deep in pelvis with chin in posterior position, manual correction when version is contraindicated. If this fails, craniotomy or symphysiotomy are the alternatives.

5. In the mildly contracted flat pelvis with normal child, version should be elected.

6. Contracted pelvis of mild degree, normal child, manual correction followed by expectancy.

7. Face presentation complicated by placenta previa, prolapse of the cord or extremities, rigidity of the cervix, threatened rupture of the uterus, or a dead child, monstrosity, or highly contracted pelvis, offers no good field for manual correction, though it rarely may be done.



GERSUNY'S SUBCUTANEOUS PARRAFFIN INJECTION AND ITS APPLICATION IN GYNECOLOGY. STOLTZ (*Monate fur Geburts und Gynakol.*)—In gynecological practice paraffin injection has been used for the cure of cases of incontinence of urine and of prolapse of the uterus when plastic operations had either failed or were contraindicated. The first case treated by Gersuny was a patient aged 25, who had lost control of the sphincter vesical. Seven attempts at cure by plastic operations failed. It was found that the two large folds of harder mucous membrane prolapsed through the dilated urethra, and although these were easily replaced they could not be retained. Gersuny injected vaselin into these folds, then replaced them and injected more vaselin around the neck of the bladder, with the result that no further prolapse occurred and the complete power of urinary retention was regained.

Pfaunenstiel, Kapsammer, Wertheim and others described similar cases with more or less good results.

The author describes two cases in which similar measures were employed, in one of which there was a serious laceration of the urethra itself, allowing prolapse of the vesical mucous membrane, and in the other the urethra was intact. In both, however, there was maintenance of urine on standing. The second case was completely cured by injection of paraffin melting at 42° C. around the neck of the bladder. The first case was treated in the same manner, but as a result the patient was unable to pass urine at all, and after catheterization and dilatation of the opening, at last the neck of the bladder had to be divided, incontinence again resulting.

The results in most of these cases were so encouraging that Halban conceived the idea of utilizing a similar procedure for the treatment of cystocele.

His procedure was to inject about 20-25 c. c. of paraffin in a half ring around the cystocele, putting his needle in the midline between the bladder and vagina and then directing it into the paravaginal tissues on each side through the same opening.

The results in Halban's cases were good, the patients being unable to make the vaginal wall prolapse afterwards, were with strong pressure. Similar cases were reported by Gersuny, Eckstein and others, mostly with good results. This method of treatment seems indicated in cases where the pessary treatment is useless,

where operations either have been of no avail or are contraindicated, and where no further pregnancy is likely to occur.—From Extract of *Jour. Obst. and Gyn. of the British Empire*.

AN INVESTIGATION INTO THE CAUSATION OF PUERPERAL INFECTION.—A. G. R. Foulerton and Victor Bonney (*Jour. Obst. and Gyn. British Empire*, Feby, 1905), give the results of the bacteriological investigation of

1. Twelve cases in which the puerperium was normal.
2. Fifty-four cases of either miscarriage or labor at full term in which fever occurred.

3. Thirty cases of cervicitis in non-pregnant women.

The general results of examination are:

1. Streptococci were present in the uterus in twenty-five out of thirty-nine cases in which cultures from the contents of the uterus were obtained.

2. Streptococci were present in the vagina in two cases out of seventeen in which the contents of the uterus were apparently sterile.

3. Streptococci were present in the uterus in twenty-five out of forty cases of severe fever and in the vaginal secretion in two out of five similar cases in which the contents of the uterus were sterile.

4. Out of fourteen cases of slight fever, the contents of the uterus were sterile in ten, and cultures of bacteria were obtained in four, but not a streptococcus.

5. Of the fifteen cases in which the contents of the uterus were sterile, a marked proportion were primiparae, presenting considerable lacerations of the cervix and perineum.

6. The presence of the micrococcus pneumoniae was proved in four of the cases and in two others it was probably present.

7. In the present series the absence of the m. gonorrhea and anaerobic organisms was noticable.

8. In the series of cases in which the cervical secretion was examined proof was obtained of the presence in the cervical canal of non-pregnant women of bacteria, which had also been found in the puerperal infections of the uterus; but in no case were streptococci found.

The apparent absence of primary infection of the uterus with

b.coli communis was noted especially. As a secondary infection it might accentuate the symptoms from a superficial survey of one of the groups of cases, but they do not feel justified in making any pronouncement on this head from such a short series.

In regard to the absence of the m. gonorrhoea and anaerobic organisms from this series of cases, their results must be compared with those of Kronig, Whitridge, Williams and Vogil.

---

## Department of Nervous and Mental Diseases.

---

In Charge of DR. P. E. ARCHINARD and DR. ROY M. VAN WART,  
New Orleans.

---

NERVOUS LESIONS PRODUCED BY ATHEROMATOUS ARTERIES—Elliott Smith in an article in the *Jour. of Neurology and Psychiatry*, Vol. III, No. 3, thinks that too little attention has been paid to these lesions. He states that he has seen six cases in five years in the dissecting-rooms of the Cairo School of Medicine. The case of a Turk, aged sixty, is mentioned. The pressure of enlarged atheromatous internal carotid arteries had caused complete atrophy of the left and a partial atrophy of the right optic nerves. Another case showed disease of the vertebral arteries and the lower part of the basilar artery leading to pressure and distortion of the medulla. He was not able to find any extensive literature on this subject.

MENTAL UNSOUNDNESS AND MENTAL DISEASE IN A LOCAL PRISON.—Cotton (*Journal of Mental Science*, January, 1905) has studied the mental condition of the criminal prisoners in a local prison. The inmates consisted of those awaiting trial or convicted and serving a sentence of less than two years. After considering the difficulties in the way of obtaining a history he divides them as regards the mental condition into four classes. The first group contains those whose mental condition is much above the average of the outside world. Most of these are the professional criminals who have "calculated the chances and taken the risk of the game."

The master burglars, master swindlers, organizers of swindles, forgers, the whole tribe of sharpers, confidence tricksters, and false pretense men, and fraudulent bankrupts belong here. They are as a rule acute, plausible, shameless, audacious, and often of dignified presence and ingratiating and even fascinating manners. It is among the false pretence men that cases of attempted suicide are most frequent. Some of them simulate insanity very successfully while others do so more coarsely.

The second group, that of the inebriate prisoners, formed the largest in the local prison, constituting probably 90% of the males and a larger of the females. The majority seem to be sane when sober, but are more or less insane when drinking. Their crimes are mostly those of violence and are not such as would require systematic planning. Many sooner or later suffer from a terminal alcohol dementia. It is among these that the severest cases of alcoholic insanity are seen. Very grave cases of delirium tremens are not infrequent.

To the third group belonged a class (generally habitual), of petty offenders, who are just as obviously under the general plane of physical and mental development as the others are above it. They seem incapable of earning a living outside, but work very well under supervision. If their record could be traced we would probably find that they belonged to the class of congenital imbeciles, chronic alcoholic demented or as sufferers from a mild dementia secondary to an attack of some acute insanity.

To the fourth class we have the small number of undoubtedly insane prisoners assigned. While in prison they are a source of anxiety to all who have anything to do with them. They are charged with all sorts of crimes from wandering abroad without any visible means of support to murder. They belong not in the prison but in the hospital.

**CALCIFICATION OF THE FINER CEREBRAL VESSELS.**—Pick, (*Amer. Jour. of Insanity*, Vol. LXI, No. 3), after discussing in detail the pathology of this condition, relates the following case: The patient, a young man of 24 years of age, gave a negative family history. His personal history was that his birth had been normal and that as a child he had never been sick. He had attended school



and was supposed to have learned to read and write. His first epileptic fit, the date of which was not obtainable, was attributed to a fright. The second occurred two years later and the attacks then followed in rapid succession. The bromides produced no beneficial effect. He was dull and apathetic, though he could count, say his prayers and knew the ten commandments. He became gradually weaker, developed edema of the lungs and finally died with clonic convulsive movements in the face and upper extremities. The autopsy showed calcification of the finer vessels. The larger were microscopically normal.

The second case was that of a woman, aged 42, who was transferred from the eye clinic, after a cataract operation, complaining that she could see nothing. The objective examination was negative. She was profoundly depressed. She developed three attacks of tetany in succession and finally died with cyanosis and signs of consolidation at the base of the right lung. The autopsy showed calcification of the smaller vessels of both the cerebrum and the cerebellum.

---

## Department of General Medicine.

---

In charge of DR. E. M. DUPAQUIER, New Orleans.

---

GUMMA AND TABES.—Though the great majority of tabes cases are due to syphilis, it is rare to observe syphilitic lesions co-existing with tabes. Gaucher, Fournier and Touchard reported the case of a woman who had presented a classical tabes with a negative history of syphilis, when she developed at the ensiform appendix a gumma, undeniably characteristic of syphilis.—*Société Médicale des Hopitaux*. Paris—*Journal de Med.*, 10 Mar., 1905.

GENERAL PARALYSIS.—From statistics collected in city practice, Fournier states that general paralysis is never a manifestation of syphilis within two years after infection.

It is but seldom, almost exceptionally, a manifestation of syphilis twenty years after infection.

It is usually, 81 per 100, a manifestation of syphilis from the

sixth to the twenty-fifth year, markedly the tenth, after infection.

It usually follows very mild cases which were not thoroughly treated as figures show:

Five per cent. of the cases followed syphilis treated for 3 or 4 years (usual course). Fifteen per cent of the cases in those treated less than 2 years (18 months average). Eighty per cent. of the cases in those treated less than one year.

Therefore, 4-5 of the cases of general paralysis in town appear in persons infected with syphilis who were improperly treated.

Only five out of a hundred cases of general paralysis had gone through a serious course of treatment.—(*Académie de Médecine. Journal de Médecine Pratique.* Mars. 10, 1905.)

---

## Department of Ear, Nose and Throat.

---

In charge of A. W. DEROALDES, M. D., and GORDON KING, M. D.  
New Orleans.

---

ANESTHETIC IN OPERATIONS FOR ADENOID VEGETATIONS.—Much diversity of opinion exists and any many discussions have arisen in recent times in regard to the use of a general anesthetic for the removal of adenoid growths and enlarged tonsils in children. Suarez de Mendoza has recently expressed his views on the subject in a paper read before the 7th Otological Congress, from which the following conclusions were deducted:

1st. General anesthesia for the removal of adenoid vegetations should be considered, as a general rule, dangerous and unjustifiable for an operation so short and attended by so little pain.

2nd. The number of fatalities from Bromide of Ethyl prove that narcosis from that agent is as dangerous as that from cholroform.

3rd. Recourse to narcosis is only justifiable for such operations in certain rare instances, where complete control and freedom from pain is considered necessary by the surgeon.

4th. The surgeon should be careful not to assure the patients or their parents that the anesthesia is absolutely devoid of danger.

5th. Those who, for diverse reasons, have faith in the safety of any general anesthetic, or who think lightly of the dangers thereof,

should bear in mind that anesthesia is nothing less than a limited degree of poisoning, and that the physiological dose may be very near the toxic dose.

Also that when the surgeon approaches a patient with the anesthetic bottle in hand he brings upon that patient the chances of death.

---

## Department of Ophthalmology.

---

In Charge of Drs. BRUNS and ROBIN, New Orleans.

---

NEW THEORY OF TRANSMISSION OF SYMPATHETIC OPHTHALMIA.  
—In a paper read before the 10th International Congress of Ophthalmology at Lucerne, Dr. Motais of Angers, describes the venous communication of the two eyes, in explanation of the transmission of Sympathetic Ophthalmia.

The superior ophthalmic veins which form the entire venous system of each eye and might carry off, at times, all the septic products, communicate posteriorly with the cavernous sinuses into which they empty; these sinuses being in relation with the coronary and transverse occipital sinuses. Anteriorly this communication takes place through the nasal and angular branches, an anastomotic plexus, sometimes simple and sometimes complex, across the root of the nose. This shows plainly the mixing of blood from both orbits and both eyes and the ease with which it takes place in view of the fact that throughout this circuit the veins are destitute of valves. By this channel of communication he explains:

1st. The usual transmission from uveal tract to uveal tract;

2nd. Sympathetic migrations after enucleation.

The author submits this new theory to the careful attention of the world's ophthalmologists. *Recueil d'Ophthalmologie*, March, 1905.

## Louisiana State Medical Society Notes.

---

In charge of DR. P. L. THIBAUT, Secretary, 141 Elk Place.

---

**OFFICERS**—President, Dr. Charles Chassaignac, New Orleans; 1st Vice President, Dr. Oscar Dowling, Shreveport; 2nd Vice President, Dr. L. C. Tarleton, Marksville; 3rd Vice President, Dr. J. F. Buquoi, Colomb; Secretary, Dr. P. L. Thibaut, New Orleans; Treasurer, Dr. M. H. McGuire, New Orleans.

**COUNCILLORS**—Drs. A. G. Friedrichs, Chairman, 2nd Cong. Dist., 641 St. Charles St., New Orleans; J. J. Ayo, Sec'y., 3rd Cong. Dist., Bowie; P. E. Archinard, 1st Cong. Dist., New Orleans; S. L. Williams, 5th Cong. Dist., Oak Ridge; N. K. Vance, 4th Cong. Dist., Shreveport; C. M. Sitman, 6th Cong. Dist., Greensburg; C. A. Gardiner, 7th Cong. Dist., Sunset.

---

The meeting of the State Society, May 9, 10 and 11, promises to be the largest that this Society has ever had. In order to make it a success it is not only necessary that it show well in point of numbers, but it is also imperative that every one who has a duty to perform should come thoroughly prepared. We would, therefore, urge the chairmen of sections to have their papers well in hand, to register promptly and early, so as not to delay the scientific program. This admonition we also wish to impress on the gentlemen selected to open the discussion and also on members wishing to read original papers. So as not to impede the business session, which, heretofore, has always taken more of the Society's time than it should, we hope that the officers and chairmen of committees will have their reports ready to be read at the opening of the first day's session.

Let everyone read this over carefully, keep it well in mind and, particularly, do it.

### ADDITIONAL TITLES OF PAPERS TO BE READ AT THE COMING MEETING.

In addition to the program already published, the following titles of papers have been received by the Committee on Scientific Work:

"Success in Medicine," Dr. L. Lazaro, of Washington.

"A Plea for the More General Use of Electro-Therapy," by Dr. Amédée Granger, of New Orleans.

"The Carrying Angle and Its Preservation in Fractures at the Elbow Joint," by Dr. J. F. Oechsner, of New Orleans.

"Reports of Unusual and Interesting Cases," by Dr. E. S. Lewis, of New Orleans.



"The Value of Rest in Gynecology," by Dr. S. M. D. Clark, of New Orleans.

"Gonorrheal Ophthalmia in the Adult and in the Infant," by Dr. H. D. Bruns, of New Orleans.

"Report of Two Cases of Ovarian Cyst, with Twisted Pedicles," by Dr. E. L. McGehee, Sr., of New Orleans.

"Colles Fracture," by Dr. J. V. Bonnette, of Pollock.

"The Early Diagnosis of Carcinoma of the Stomach," by Dr. S. K. Simon, of New Orleans.

"Two Interesting Surgical Cases," by Dr. F. W. Parham, of New Orleans.

"High Amputation of the Cervix Uteri for the Control of Metrorrhagia, due to Chronic Metritis," by Dr. C. J. Miller, of New Orleans.

"Ethyl Chloride as a General Anesthetic in Surgery," by Dr. E. D. Martin, of New Orleans.

"A Case of Uncinariasis," by Dr. T. S. Dabney, of New Orleans.

"Ulcer of the Stomach," by Dr. J. A. Storck, of New Orleans.

"The Insanity of Epilepsy," by Dr. E. M. Hummel, of Jackson.

"The Relation of Pleurisy to Tuberculosis," by Dr. Silvio Von Ruck, of Asheville, N. C.

"Sodium Tellurate; Report of Five Years' Practical Experience With It," by Dr. E. M. Dupaquier, of New Orleans.

"Report of a Case of Tetanus Following Wounds Inflicted by the Explosion of a Giant Fire-cracker," by Dr. F. M. Thornhill, of Arcadia.

"Treatment of Prolapse of the Rectum by Rectopexy," by Dr. S. P. Delaup, of New Orleans.

"Some Notes on the Treatment of Syphilis," by Dr. W. E. Parker, of Hot Springs, Ark.

MOREHOUSE PARISH MEDICAL SOCIETY elected the following officers at the meeting held March 22, 1905: President, Dr. J. B. Vaughan, of Collinston; Vice President, Dr. E. W. Hunter, of Mer Rouge; Secretary-Treasurer, Dr. O. M. Patterson, of Bastrop.

TENSAS PARISH MEDICAL SOCIETY elected the following officers on April 3: Dr. P. L. Bellinger, of Waterproof, president; Dr. S. A. Murdoch, of St. Joseph, vice president; Dr. E. Dunbar Newell, of St. Joseph, secretary-treasurer.

## PARISH SOCIETIES CHARTERED.

CONCORDIA PARISH MEDICAL SOCIETY.—Organized, March 5, 1905. Chartered, April 3, 1905. Charter members, 6. President, Dr. D. H. Trepagnier, of L'Argent; Vice President, Dr. S. W. Scott, Black Hawk; Secretary-Treasurer, Dr. J. T. Reeves, of Ferriday. The Society will meet quarterly, on the second Monday in January, April, July and October. Other members are: Drs. C. H. Burle, of Monterey; M. C. Reeves, of Vidalia, and W. C. Pugh, of Lismore.

DESOTO PARISH MEDICAL SOCIETY.—Organized, March 29, 1905. Chartered April 10, 1905. Charter members, 16. President, Dr. M. M. Bennerman, Grande Cabe; Vice President, Dr. E. I. Persinger, Mansfield; Secretary-Treasurer, Dr. H. J. Parsons, Mansfield. Other charter members are: Drs. J. B. Bixler, Lula; J. C. Calhoun and J. D. Calhoun, Mansfield; E. Davies, Mansfield; W. J. Headrick, Logansport; J. E. Houston, Logansport; J. L. Leopold, Grand Cane; W. K. Moseley, Keatchie; W. A. Nabors, Naborton; N. P. Reeves, Logansport; S. J. Smart, Logansport; H. C. Stokes, Mansfield.

GRANT PARISH MEDICAL SOCIETY.—Organized April 13, 1905. Chartered, April 19, 1905. Charter members, 8. Dr. T. J. Harrison, of Montgomery, president; Dr. Milton Dunn, of Colfax, vice president; Dr. J. L. Woodall, of Montgomery, secretary; Dr. E. H. Blackwood, of Colfax, treasurer. Other charter members: Drs. G. W. Durham, of Verda; J. V. Bonnette, of Pollock; W. J. Roberts, of Colfax; W. A. Jones, of Colfax. Meets three times annually, on the 4th Saturday of January, May and September.

THE AVOYELLES PARISH MEDICAL SOCIETY, Dr. C. J. Ducoté presiding, met in regular quarterly session at Cottonport at 7 p. m., on April 6. Twenty-three members answered roll call. The subject of Pneumonia was the topic of the meeting and a well-prepared paper was furnished by Dr. T. A. Roy, of Mansura. Dr. G. L. Drouin opened the discussion, which afterwards was engaged in by all the members present. This paper, together with a short monograph on Empyema, by the same author, will appear in *THE NEW ORLEANS MEDICAL AND SURGICAL JOURNAL*.

Drs. J. J. Heydel, Tulane, 1901, Plaquemine, La., and A. L. Bordelon, Sewanee, 1899, Cottonport, La., were elected to membership.

Dr. P. Jeansonne and Dr. E. Kiblinger had a medical case before the Society for diagnosis, which proved an interesting topic for an hour's discussion.

The following resolution, by Dr. C. J. Ducoté, was read and adopted for a three months' trial:

In order to encourage and allow members of the Avoyelles Parish Medical Society to attend the meetings of the different medical societies or take post graduate courses, or occasional vacations, or, in case of sickness, without too great pecuniary loss, Be it hereby agreed that the physicians in the neighborhood where said physician resides shall answer his calls and attend to his practice without compensation. A physician wishing to absent himself should announce the fact to his fellow members by letter or otherwise, stating the probable dates of his departure and return, whereupon it will be incumbent to answer his calls and attend to his practice, and keep a strict account, as though they were doing the work for themselves. This privilege shall be good for a period of two weeks only; longer absences to be arranged by the affected physicians. Immediately upon the return of the absenting member, it shall be the duty of his fellow members to turn over to him his practice, also render an account of their stewardship. This refers to "family practice."

Resolution by Dr. Kiblinger:

Resolved, That each member of The Avoyelles Parish Medical Society notify the secretary of each name of the unregistered midwives who practice in their community, and, when notified, it will be the duty of the secretary to instruct said midwives to cease their nefarious work.

The social feature of the program was the elegant banquet to the profession by the local members. Five of Cottonport's most beautiful young ladies—Misses Lola and Benie Lemoine, Girtie and Mamie Bordelon and Susie King Caine assisted Mrs. J. B. Lemoine in the banquet room.

The three coincidences—the date of the meeting, the celebration of the thirtieth year of graduation in medicine of the presi-

dent, and the anniversary of the birth of the host, Dr. J. B. Le-moine—were sufficient to inspire a toast from each member present.

The meeting adjourned at 2:30 a. m., to meet at Plaucheville on the first Thursday in July, at 10 a. m. Puerperal Septicemia will be discussed. Dr. R. G. Fox will prepare a paper, and Dr. S. J. Couvillon will open the discussion

---

## Medical News Items.

---

THE STATE TERRITORIAL AND GOVERNMENT HEALTH OFFICERS are to meet in Washington, May 15, under the auspices of the Public Health and Marine Hospital Service. It is proposed to discuss the following questions at this meeting: The International Control of Leprosy and The Methods of the Transmission of Typhoid Fever.

THE EDINBURGH MEDICAL JOURNAL CELEBRATES ITS CENTENNIAL with the year 1905. The January issue was devoted to a series of articles dealing with notable contributions in back numbers of the Journal.

THE NEW INTERNES AND EXTERNES AT THE CHARITY HOSPITAL SUCCESSFUL in the recent examination are as follows: Internes—G. H. Applewhite, Lucien H. Landry, Lawrence B. Hudson, Merrick E. Saucier, Adolph D. Henriques, Arthur Anslem Herold, John Keller Griffith, William H. Harris, Frank Leroy Carson, Henry Daspit, Jr. Externes—Leo Sparito, Sidney P. Israel and R. J. Pendergast.

THE CONFEDERATE STATES MEDICAL AND SURGICAL JOURNAL.—Dr. W. W. Keen of Philadelphia is anxious to get a set of this publication for the College of Physicians of Philadelphia. Any information concerning these may be sent direct to him at 1729 Chestnut street, Philadelphia.

THE FIFTEENTH INTERNATIONAL MEDICAL CONGRESS WILL BE HELD at Lisbon in April, 1906. The officers of the Executive Committee for the United States selected are: Drs. Frank Billings,



William Osler, Frederick Shattuck, Abraham Jacobi and J. H. Musser, Chairman. Dr. Raymond Guiteras at No. 75 West 55th Street, New York, is the Secretary for America.

DIED—DR. J. R. FRANKLIN, of Hornbeck, La., died March 31. The doctor was a member of the State Medical Society.

DR. GEORGE W. PURNELL died at Hazlehurst, Miss., April 4; aged 70 years. He graduated from the Jefferson Medical College and was at one time a member of the Staff of the Charity Hospital in this City.

DR. N. E. WHITEHEAD died at Greenwood, Miss., March 25. The doctor practiced for forty-five years at Greenwood and was one of the JOURNAL'S most valued subscribers.

PERSONAL—DR. S. B. SALATICH has been appointed assistant house surgeon of the Hotel Dieu. Dr. Salatich is one of this year's graduates of the Ambulance Corps of the Charity Hospital.

PERSONAL—We are pleased to note that DR. AMEDEE GRANGER of this City, has been added to the list of associate editors of the *Journal of Advanced Therapeutics*, among whom was already Dr. W. Scheppegrell, also of this City. Dr. Granger has charge of the department of "Review of French Current Literature."

THE BOARD OF MEDICAL EXAMINERS FOR THE STATE OF TEXAS will hold its next meeting in Austin, Texas, May 2, 3, 4 and 5, 1905, for the examination of applicants and the transaction of other business. For further information address the Secretary, Dr. M. M. Smith, Austin, Tex.

THE LOUISIANA SOCIETY OF NATURALISTS held an interesting meeting in Baton Rouge March 25, and Dr. J. W. Duprée read a very interesting paper on "The Mosquito."

FREDERICK STEARNS & CO. HAVE BEEN CELEBRATING THEIR GOLDEN JUBILEE and the medical publication issued by them under the editorship of Mr. James Knox called *The New Idea* has distributed a special number which it calls "The 50th Anniversary Number." It contains much interesting matter, portraits of the

founder of the company and of its present officers, as well as the buildings erected from time to time and denoting the progress made by this firm during the past half century.

THE AMERICAN ANTI-TUBERCULOSIS LEAGUE just closed a successful meeting at Atlanta, Ga. Dr. R. E. Conniff, of Sioux City, Iowa, was elected president. The next meeting will be held at El Paso, Texas.

THE SIXTY-FIRST SESSION OF THE AMERICAN MEDICO-PSYCHOLOGICAL ASSOCIATION was held at San Antonio, Texas. The next meeting will be held at St. Paul, Minn.

DR. S. L. POWLETT, of Hammond, La., was elected mayor of that town recently.

DIED—DR. S. H. RUSHING died at Alexandria, April 20th. Age 74. He had practiced in Rapides parish more than forty years.

---

## Book Reviews and Notices.

---

*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

---

*A Text-Book of Obstetrics.* By BARTON COOKE HIRST, M.D. W. B. Saunders & Company, Philadelphia, New York, London.

Favorable reviews of two previous editions have been written by us; and this edition has not lessened our high opinion of this work.

The present volume contains a more elaborate treatment of pelvimetry than any of its predecessors. The chapter on forceps is practically the same, and still contains the suggestion that attempts might be made to apply the instrument to the "loose head above the superior strait in cases of placenta praevia" when podalic version would be safer for mother and foetus. It is true that the latter procedure is strongly urged in the chapter on Placenta Praevia.

Eclampsia is treated with reasonable brevity and great intelligence. The discussion is relieved of the usual long list of historical and abandoned theories, that to the student are fatiguing and mystifying. The author concludes that "all that can be said at present is that Eclampsia is the result of the retention in the body of substances that should have been disposed of by the excretory organs, etc." The treatment is equally practical and sensible. The chapter on Sepsis is very elaborate, and is happy in the clearness and simplicity of its arrangement and wording.

This volume contains the most recent and accepted ideas on the Art and Science of Obstetrics, is much larger and is more profusely illustrated than those preceding it, and will prove a great teacher for the student and a reliable adviser for the practitioner.

MICHINARD.

---

*A Nurse's Hand-Book of Obstetrics.* By J. B. COOKE, M.D. J. B. Lippincott Company, Philadelphia and London.

The title of this book, we believe, is a misnomer. The word "Nurse's" should be replaced by that of "Midwife's." This little work contains some valuable suggestions to the nurse about the diet and nursing of the puerperal individual and of her infant. But there is just enough of the art and science of Obstetrics to "intoxicate her brain." Why in the name of common sense should a *nurse* bother her head about pelvimeters, the diameters of the woman's pelvis and of the fetal head, or about the application of Tournier's forceps at the brim, or the best way for the induction of premature labor, or concerning the behavior of spermatozoa, etc.?

MICHINARD.

---

*Epilepsy and Its Treatment.* By WILLIAM P. SPRATLING, M.D. W. B. Saunders & Company, Philadelphia, New York and London, 1904.

The appearance of a work devoted to epilepsy, a disease which still presents so many problems and concerning which we as yet know so little, meets a distinct want. The work of Gowers has for many years been the only special study available to the English student. The excellent foreign monographs of Binswanger, Fere and others have not been translated. There is perhaps no one in this country who is so fitted to write a book on this subject as Dr. Spratling. His long experience as the head of the Craig Colony has given him unequalled facilities for the study of epilepsy. A careful examination of this work shows that it represents a good account of our present knowledge of epilepsy. The chapters on treatment are especially full and are written by one who has tested all and can speak of that value from experience.

VAN WART.

---

*Lectures on the Biochemistry of Muscle and Nerve.* By W. D. HALLIBURTON, M.D., F.R.S. P. Blakiston's Son & Co., Philadelphia, 1904.

These lectures present in a single volume the numerous researches of the writer on muscle and nerve. They can be recommended to those interested in this subject who are as yet familiar with the researches of Dr. Halliburton. The chapters dealing with the presence of choline in the blood and cerebro-spinal fluid are of special interest.

VAN WART.

---

*Atlas and Epitome of General Pathologic Histology.* By DR. H. DURCK, of Munich. Edited, with additions, by LUDVIG HEKTOEN, M.D. W. B. Saunders & Company, Philadelphia, New York, London, 1904.

This volume is fully equal to the two previous on Special Pathology. The plates are excellent and the text sufficiently explanatory to convey a working knowledge of that subject to the student conscientiously studying them.

VAN WART.

*Text-Book of Insanity.* Based on chemical observations for practioners and students of medicine. By Dr. R. VON KRAFFT-EBING. Authorized translation from the last German edition by CHARLES GILBERT CHADDOCK, M.D., with an introduction by FREDERICK PETERSON, M.D. F. A. Davis Company, Philadelphia, 1904.

The techings of Krafft-Ebing are so well known that the appearance of an English translation of his work on psychiatry will be welcomed. The seventh German edition was just completed at the time of his death in 1902. The system of classification is very similar to that in use by most English and American writers. The work can be recommended to those interested in psychiatry as representing the views of one of the greatest of the older German alienists.

VAN WART.

*A Practical Treatise on Nervous Exhaustion (Neurasthenia), Its symptoms, Nature, Sequences, Treatment.* By GEORGE M. BEARD, A.M., M. D. Edited with notes and additions, by A. D. ROCKWELL, A.M., M.D. Fifth edition, enlarged. E. B. Treat & Company, New York, 1905.

The work of Beard on Neurasthenia is so well known that the appearance of a new edition will be welcomed by all interested in that subject. While our knowledge has increased since the work was first written, so well did the author appreciate his subject that it can still be read with great profit.

VAN WART.

## Publications Received.

**Lea Bros. & Co.,** Philadelphia and New York, 1905.

*The Medical Epitome Series. Medical Diagnosis,* Hollis-Pederson.

*Medical Epitome Series. Diseases of the Eye and Ear.* Alling-Griffin.

*The Urine and Feces in Diagnosis,* by Drs. Otto Hensell and Richard Weil, in collaboration with Dr. Smith Ely Jelliffe.

*Text-Book of the Practice of Medicine,* by Dr. Robert Armory Hare.

**The Year Book Publishers,** Chicago, 1905.

*Practical Medicine Series of Year Books.* Head. Vol. I, *General Medicine*, by Drs. Frank Billings and J. H. Salisbury. Vol. II, *General Surgery*, by Dr. John B. Murphy.

**F. A. Davis & Co.,** Philadelphia, 1905.

*Conservative Gynecology and Electro-Therapeutics,* by Dr. C. B. Massey.

**E. B. Treat & Co.,** New York, 1905.

*Thoughts for the Occasion,* by Dr. Franklin Noble.

*The International Medical Annual for 1905.*

**The Clinic Publishing Co.,** Chicago, 1905.

*American Alkalometry,* Vol. IV. Abbot-Waugh.

**W. T. Keener & Co.,** Chicago, 1905.

*Diseases of the Heart,* by Dr. E. H. Colbeck. 2nd Edition.

*The Open-Air Treatment of Pulmonary Tuberculosis,* by Dr. F. W. Burton-Fanning.



**D. Appleton & Co.**, New York and London, 1905.

*Chemical and Microscopical Diagonis*, by Dr. Francis Carter Wood.

**P. Blakiston's Son & Co.**, Philadelphia, 1905.

*Malformations of the Genital Organs of Women*, by Dr. J. Henry C. Simes.

*The Thyroid and Parathyroid Glands*, by Dr. Hubert Richardson.

**J. B. Lippincott Co.**, Philadelphia and London, 1905.

*A Hand-Book of Nursing*. Revised Edition. For the hospital and general use. Published under the direction of the Connecticut Training School for Nurses.

### Miscellaneous.

*Section on Ophthalmology*. College of Physicians of Philadelphia.

*8th Biennial Report of the Trustees of the North Dakota Hospital for Insane for the Period Ending June 30, 1904*.

*Report of the Spread of Typhoid Fever in U. S. Military Camps During the Spanish War of 1898*. Reed-Vaughan-Shakespeare. Vol. I.

*56th Annual Report of the Board of Trustees and Superintendents of the Central Indiana Hospital for the Insane for the Fiscal Year Ending October, 1904*.

*The New Eye, Ear, Nose and Throat Hospital at New Orleans, La.*

*The Eye, Mind, Energy and Matter*, by Dr. Chalmers Prentice, of Chicago.

*Pennsylvania Report of the State Board of Health, 1903*. Vols. I and II.

## Reprints.

*Diabetes Mellitus and Its Treatment*, by Dr. J. H. Reed.

*Tic Douloureux and Other Neuralgias from Intra-Nasal and Accessory Sinus Pressures; Cephalagia and Tic Douloureux from Accessory Sinus Affections*, by Dr. Sargent F. Snow.

*Some Medical Aspects of the Diseases of Gall-Bladder and Gall-Ducts; Some Aspects of Medical Education*, by Dr. John H. Musser.

*Board of Health of the State of New Jersey*. Sanitary Inspection Service.

*The Limitation of the Venereal Diseases*, by Dr. Denslow Lewis.

*The Importance of Testing the Ocular Muscle Balance for Near as Well as for Distance*, by Dr. Samuel Theobald.

*The Genesis of Sympathetic Ophthalmitis*, Ibid.

*A Consideration of Some Tendencies in Modern Medical Education*, by Prof. Joseph D. Craig, M.D.

*Two Cases Presented to the Clinical Society of the N. Y. Post-Graduate School and Hospital*, December 16, 1904, by Dr. William Seaman Bainbridge.

*Surdite et Fievre Typhoide*, by Dr. Marcel Natier.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)  
FOR MARCH, 1905.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	6	2	8
Intermittent Fever (Malarial Cachexia) .....	1	1	2
Small Pox.....		1	1
Measles.....			
Scarlet Fever.....	4		4
Whooping Cough.....	2	6	8
Diphtheria and Croup.....	3		3
Influenza.....	10	11	21
Cholera Nostras.....	1	1	2
Pyemia and Septicemia.....	3		3
Tuberculosis.....	49	42	91
Cancer.....	24	6	30
Rheumatism and Gout.....	4		4
Diabetes.....			
Alcoholism.....	2		2
Encephalitis and Meningitis.....	4	1	5
Locomotor Ataxia.....	1		1
Congestion, Hemorrhage and Softening of Brain.....	19	5	24
Paralysis.....	2	1	3
Convulsions of Infants.....	3		3
Other Diseases of Infancy.....	19	7	26
Tetanus.....	3	2	5
Other Nervous Diseases.....			
Heart Diseases.....	44	16	60
Bronchitis.....	8	4	12
Pneumonia and Broncho-Pneumonia.....	46	45	91
Other Respiratory Diseases.....	3	2	5
Ulcer of Stomach.....			
Other Diseases of the Stomach.....	6	1	7
Diarrhea, Dysentery and Enteritis.....	12	4	16
Hernia, Intestinal Obstruction.....	2		2
Cirrhosis of Liver.....	5	1	6
Other Diseases of the Liver.....	2	2	4
Simple Peritonitis.....		2	2
Appendicitis.....	2	3	5
Bright's Disease.....	31	18	49
Other Genito-Urinary Diseases.....	3	1	4
Puerperal Diseases.....	1	3	4
Senile Debility.....	12	9	21
Suicide.....	4		4
Injuries.....	24	21	45
All Other Causes.....	15	5	20
TOTAL.....	380	223	603

Still-born Children—White, 21; colored, 17; total, 38.

Population of City (estimated)—White, 239,000; colored, 86,000; total, 325,000.

Death Rate per 1000 per annum for Month—White, 19.08; colored, 31.11; total, 22.26.

## METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure..... 30.06  
Mean temperature..... 65.  
Total precipitation..... 7.80 inches  
Prevailing direction of wind, southeast.

# *New Orleans Medical and Surgical Journal.*

---

VOL. LVII.

JUNE, 1905.

No. 12

---

## Original Articles.

---

(No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of one hundred reprints of his article will be furnished each contributor should he so desire. Covers for same, or any number of reprints may be had at reasonable rates if a **Written** order for the same accompany the paper.)

---

## ANNUAL REPORT OF 1905

To Edwin Boone Craighead, A. M., LL. D., President of the Tulane University of La., at the Annual Commencement of the Medical Department, May 3d, 1905.

By PROF. STANFORD E. CHAILLÉ, A. M., M. D., LL. D.,  
Dean of the Medical Department, New Orleans, La.

MR. PRESIDENT—The Medical Department, now about to close the seventy-first year of its existence, will this day add to its list of alumni 83 graduates in medicine and 10 in pharmacy, so that our total list of graduates will now number 3820 in medicine and 354 in pharmacy. These graduates, because of their number and of their devotion to their alma mater, are the chief source from which annually flows the stream of students that enter our college; as is exemplified, in part, by the fact that during the forty-seven years of my own official service, I have helped to educate numerous sons of my former pupils and, in one exceptional case, father, son and grandson.

My friend and colleague, Dr. T. G. Richardson, who gave to this college 31 years (1858-1889) of invaluable service as a professor and to whom, directly and indirectly, the Medical Department owes a greater debt of gratitude than to any other person, resigned in 1885 the deanship, that he had occupied during the period of the greatest trials of this college and for the unprecedentedly long term of twenty years. This commencement completes also my twentieth year as Dean and, "lest we forget," this opportunity is taken to recall some of the educational progress made, some of the services rendered by the medical faculty, and some of the notable improvements accomplished during the last twenty years.

At our commencement in 1886, the close of my first year as Dean, I delivered the first Annual Report ever submitted to the public in behalf of the Medical Department. In it some improvements were indicated that should be required, and among these were the following, viz.: evidence of the preliminary education of every student prior to his admission to the Medical Department; increase in the number of teachers; greater knowledge in order to be graduated; lengthening of the annual session and attendance upon three instead of two annual sessions to be indispensable for graduation.

To what extent this program has been accomplished will be indicated by contrasting the session that closed in 1885 with the session now closing.

Then our circular of information for students, published in every annual catalogue, occupied five pages; now fourteen pages are used and are insufficient.

*Then* there were some books for a library, but these were, for the most part, out of date, and mere uncatalogued and of little use; *now* we have a well-organized, card-catalogued and well-used library of over 4000 valuable books and 2000 pamphlets [in addition to over 3000 other books and pamphlets of much less value kept apart in an annex to the library].

*Then* no woman had ever been admitted as a student; in 1888 women were admitted solely to our laboratory of practical pharmacy, but since 1894 they have been admitted to all courses in pharmacy, on the same terms and conditions required of men.

*Then*, no evidence of education was required for admission; since 1893 the minimum requirement has been a certificate signed by either a Superintendent of Education or a Principal of a public



high school, that the bearer has been examined and has been found to possess scholastic attainments equal to those required of first-grade teachers in the public schools.

*Then* there were only two laboratories, viz.: the wards of the hospital and the dissecting rooms; *now* there are eight laboratories and at least three more are needed.

*Then*, only eleven branches of medicine were taught and *now* there are twenty-nine.

*Then* there were only nine laborious teachers, who were aided in the hospital by nine chiefs of clinic, but the latter did very little work and received no pay, and *then* there were only eleven teachers and employees on the pay roll. *Now* there are forty-nine teachers, every one doing more work than ever before, and there are four names on the pay-roll.

*Then*, candidates for graduation were required to have attended only two annual sessions of twenty-three weeks each; but actual attendance, except at examinations, was not enforced and was generally less and frequently very much less than the total forty-six weeks; in 1893 three annual sessions were required and since 1900 four annual sessions have been required; these sessions are now twenty-eight weeks each and of the total 112 weeks, ninety weeks' attendance is obligatory.

*Then* none of the courses were graded; *now* the courses are graded, but some of these need better grading.

*Then* there were only eleven examinations annually and only seven of these were obligatory; during the session now closing there were eighty-five obligatory examinations.

*Then* the total fees for the two required sessions were \$330, *now* they are, for the four required sessions, \$585, a total greater than any Southern and in most Northern colleges, although these fees amount in some of the latter colleges to \$800, and in at least one of them to \$1000.

*Then* the total expended annually for all salaries was less than half the amount expended at present and the administration expenses were only one-fourth what they now are.

*Then* there were only 223 students; during the present session there have been 496, and this great increase has been gained in spite of the facts, just indicated, that *now* four instead of two annual sessions are requisite to graduation, that every session has

been lengthened from twenty-three to twenty-eight weeks, that the fees have been nearly doubled, and that the requisites for graduation have been so increased that to gain our diploma requires at least three times more knowledge now than was required in 1885.

In addition to these great educational improvements, the medical faculty has conferred either on its graduates, or on the Medical Department, or on the public during the past twenty years other valuable services and of these the following deserve notice:

At the close of my first year, as a professor, I delivered, by request of the faculty, the annual address at the commencement of 1869 and I then announced that, whenever vacancies might occur, my influence and vote would always be given, other things being equal, to the graduates of the Medical Department. Then I was the *sole* graduate of this college who was a member of its faculty; now all of our professors, except two, are our graduates, and of our total forty-nine teachers only four are graduates of other medical colleges.

During the seventeen years, 1887 to 1904, the members of the faculty voluntarily contributed to the improvement of the college nearly \$17,000, viz.: \$2300 to erect the Richardson Memorial arch that gives entrance to our building, \$3000 to aid the administrators of the Charity Hospital to erect its new and valuable amphitheatre for the accommodation of medical students; and \$11,240 to increase our educational apparatus and to improve our library.

The members of the faculty contributed their influence to the enactment of the State law of 1894 inaugurating the Medical Examining Board and giving to it *alone* the power to license graduates to practice medicine in Louisiana. Prior to 1894 the law gave to all holders of our diploma the right to practice medicine in Louisiana. The members of the faculty unselfishly aided in the abrogation of the old law because of their conviction that the progress of medical education and the public good would be promoted by the new law—a law which could not have been enacted had it been opposed by the faculty—a law which, I doubt not, would be repealed should the faculty ever become convinced that its execution was injurious both to the Medical Department and the public.

In 1900 twelve out of 426 medical students were attacked, within a very few days, by small-pox. At once all other students were re-vaccinated and those that were sick were isolated in the college

museum, converted temporarily into a small-pox hospital in the able charge of Dr. P. E. Archinard. In the mean time the students continued to attend lectures, even in a lecture room on the same floor with and adjacent to the temporary hospital. This very dangerous outbreak was at once suppressed, as there were no more cases either among the students or the numerous citizens who came in contact with the students, and thus a great service was rendered and a most useful lesson taught not only to our students but also to the public.

Members of the faculty have frequently delivered highly appreciated and very useful free lectures to the citizens of New Orleans; who also gain much profit from the \$150,000 to \$250,000 expended annually among them by the students of the Medical Department. A third contribution to the public welfare has been the donation to this city of the free use for years of our bacteriological laboratory and of a chemical laboratory.

Finally, on this part of my subject, the faculty has conferred on the Medical Department a very great service. The future has not been taxed to accomplish the great progress and services that have been recorded, and the fact that not a single debt embarrasses the Medical Department renders still more certain its great future progress.

The unprecedented educational progress of this college has been most notable since October, 1893, when the faculty was given possession of its present building, adequately provided with the laboratories that had become indispensable to progress. This building, with its laboratories and their costly outfit, came from the generous hands of a noble and enlightened woman and any history of our progress demands a most prominent place for the record of this and other donations.

The Dean's Annual Report, at the Commencement of 1888, was devoted chiefly to the incalculable benefit conferred on the public by medical education, to the great financial needs of medical colleges and to citing notable instances of donations given by Northern philanthropists to a few Northern Medical Colleges; instances that could now be increased in number and in the amounts donated to such an extent that one Northern medical college now has \$5,000,000, and another is reported to have \$7,000,000; so that our country, long more backward, as to medical college

efficiency, than any other great civilized country, is destined soon to possess some of the best medical colleges in the world. Dr. Richardson was in full sympathy with my advocacy of the financial needs of our Medical Department, a subject that I continued to allude to in several subsequent annual reports.

March 3, 1891, Dr. Richardson wrote to me that "Mrs. Richardson authorized him to place at the disposal of *the Dean of the Medical Faculty* \$50,000 for the erection of a building for suitable laboratories." Dr. Richardson was earnestly advised by me to have this donation given, not to the medical faculty, but to the University, for the exclusive benefit of the Medical Department. This was done May 9, 1891, when the donation was sufficiently increased to erect a new building adequate for all purposes, including laboratories, and this amount was afterward increased sufficiently to supply the laboratories with their indispensable apparatus. This donation is specially noteworthy, not only because of the great advantages it supplied, but also because it was the very first donation ever bestowed on our college, although it had then existed fifty-seven years, and was the first donation of any magnitude ever given, as I believe, to any Southern medical college by any individual.

In 1894 occurred the deplorable death of Dr. A. B. Miles, our able Professor of Surgery and at the same time the distinguished house-surgeon of the Charity Hospital. He, following the preceding example, bequeathed to the University for the benefit of the Medical Department \$10,000; a bequest that will continue to be of frequent and great service since the greater part of it is still unexpended.

In 1902 died Mr. Alex C. Hutchinson, the wealthiest of the benefactors of our college and the only one who had no connection with it, farther than that his physician and friend, Dr. Rudolph Matas, was and still is a member of the medical faculty. Following the two preceding examples Mr. Hutchinson bequeathed property valued at \$800,000 to the University for the benefit of the Medical Department. Various suits at law questioned the validity of the will, which was not finally decided until the Federal Supreme Court on February 20, 1905, confirmed the decision of the Louisiana Supreme Court. As a result, our college will have invested in it at least \$1,000,000; thereby its progress will be even



more notable in the future than in the past and the Medical Department will increase its superiority over all Southern and will have few equals among the medical colleges of America.

Our progress in medical education has very greatly depended on the Charity Hospital. Every improvement of it promotes the welfare of the Medical Department, as well as of the public. These improvements have, since 1885, been numerous and great, and the most notable of these deserve to be recorded.

In 1885 the ambulance building was erected and the ambulance corps of medical students was organized to give prompt aid to cases of emergency. These students are students of our college, who, giving first aid to inhabitants of New Orleans, learn how best to relieve hereafter thousands of other sufferers. The ambulance service of the Charity Hospital has proved an inestimable blessing to many thousands of the victims of disease and injury, and among these the most notable was the beloved and honored President of the Southern Confederacy—Jefferson Davis,—who, in his last sickness, in 1889, was transported, by my request, from the steamboat landing to the home of the President of the Tulane Board of Administrators—Judge Fenner.

In 1892, two suitable buildings for outdoor clinics were erected. Their inestimable service to medical education is indicated by the fact that, while in 1885 the hospital accommodated about 8,000 patients, it now provides every year 30,000 patients for the study of our students and of the medical profession.

In 1893, a training school for nurses was inaugurated, and trained nurses were first employed, and in 1901 a suitable building for their accommodation was erected by means of a liberal donation philanthropically bestowed by Mr. Alex. C. Hutchinson.

In 1895, an admirable new amphitheater for the accommodation of students, and operating rooms of superior excellence, were erected, to the very great advantage of our students, as well as of hospital patients.

In 1899, the bounty of the benevolent Mrs. Milliken provided the Milliken Memorial Building, a model hospital for the accommodation of two hundred sick children, thus supplying the Medical Department with adequate means to train its students in that very important special branch of medicine—the sickness of children.

In 1890, externe students were first appointed, and now sixteen

of our students can secure in the wards of the hospital invaluable practical experience, thereby enhancing their future value to the public and promoting the efficiency of the medical department. Since 1885 the resident, or interne students, have been gradually increased from eight to sixteen, to the great advantage of both hospital and college. It would be an incalculable benefit to our college—as also to the medical profession and the public—if these thirty-four interne and externe students should be greatly increased in number.

Having completed a brief review of the last twenty years, a few words will be devoted to the present and to the future. During the session now closing, not only were all previous gains fully maintained, but the following notable additions were made: A corps of four associate professors was inaugurated; three of these were promotions, but the fourth was the addition to our list of teachers of the house surgeon of the Charity Hospital, who has unusual opportunity, and is required, to teach emergency surgery, *i. e.*, the surgery that must be executed without loss of time—and hence without opportunity to consult either books or other surgeons.

Four other instructors were added, so that the corps of teachers was increased by five, and four of these have taught and for the first time examined students on four special branches.

A laboratory for the practical teaching of two kindred subjects—physiology and pharmacology—was inaugurated. More than \$2,000 were expended for new apparatus to increase our educational resources; and, to still farther increase our requirements for graduation, it has been necessary for every student to secure from every examiner a higher pass-mark than ever before.

The 450 students of the session 1903-4 surpassed by twenty-four all previous records, and the 496 students of this session outnumber by forty-six those of the preceding session.

To the above record will now be added some considerations as to the future. The greatest need of most medical colleges is the requirement of better education for admission to them. The present minimum requirement of this and of other Southern medical colleges has been already stated, as, also, the fact that the educational certificate must be signed by either a superintendent of education or the principal of a public high school. The result has failed to fulfill the hopes first entertained by the faculty,

because experience has amply proved that some of these public officers do not hesitate to certify to unquestionable falsehoods. While the faculty has adopted measures that lessen this evil, these measures are inadequate. What measures should be adopted is the most important and perplexing question that concerns the progress of medical education. The solution of this problem involves the consideration, knowledge and experience of those surrounding conditions (on which all progress depends) and of so many different subjects that he who knows most of these is the most perplexed. The chief difficulty is not in deciding upon an adequate minimum of preparatory education, but in devising a satisfactory method of execution.

The sessions should be gradually lengthened, as promptly as conditions may justify, to eight months. Some of our courses should be better graded and our four classes be subdivided into more numerous sections. To effect this more professors and teachers will be indispensable. Action has been taken whereby the number of professors will, in a few years, be increased and other teachers should be added as soon as the annual revenues may permit.

The reputation and usefulness of our college would be greatly promoted if the faculty could make it a requisite for graduation that every candidate should have had at least one session's experience as a hospital student, but this requisite will continue to be impracticable until those who control the hospitals of New Orleans may render it possible.

The progress of medical science, by which man's welfare has been and will be promoted, to far greater extent than is generally appreciated, is dependent on medical research, and this should be fostered by all medical colleges. Any one of these that may neglect this duty cannot long maintain a foremost place in medical education. For this and other important purposes at least three more laboratories are indispensable—one for clinical medicine, one for pathological anatomy, and a much larger one for physiology and pharmacology. Our present building cannot provide them, but, it is believed, that in a few years these laboratories, free clinics and other important educational advantages will be supplied by a Josephine Hutchinson Memorial Building, and that our college will gain such strength from the Hutchinson fund that every



improvement advocated can be eventually executed with incalculable advantage to the medical department.

The frequent use of the personal pronoun in this report would be more readily excused if others appreciated, as I do, that the faculty can, within the limit of its power, do whatever it pleases, in spite of the dean, while he is powerless without the faculty's approval. No person other than myself can possibly appreciate, as fervently and as gratefully, to what great extent the annually augmented efficiency of our college has been due to the invaluable services of every member of the faculty, and to their unselfish co-operation in every measure calculated to promote the welfare of the medical department. At the close of this twentieth year of service as dean, the expression of my heartfelt thanks and profound appreciation is due not only to every one of my colleagues, and to all our teachers, but also to the thousands of students who, by their generous approbation throughout all of the many years of my official service, have contributed very much to my happiness and stimulated me to greater efforts in behalf of their education.

*Graduates of 1905:* For years past the dean has been justified in assuring every graduating class that no preceding class had ever enjoyed equal educational advantages, and I have already specified the superior advantages given to you. That you have been greatly benefited thereby is unquestionable, since no preceding class has gained a better reputation for diligence in study and for excellence in conduct and in all qualities characteristic of manly men. Hence the faculty will follow your careers with interest and with the desire to aid you, in the future as in the past, to contribute to the usefulness and the repute of your college and of your profession. The history of the careers of previous graduates will indicate what your careers are to be, and will, at the same time, further illustrate the great usefulness to the public of our medical department.

Most of our graduates are engaged solely in remunerative private practice, an occupation which, though comparatively obscure, is so beneficial to humanity that even those who profess least confidence in the medical profession, are usually loudest in complaint, when injured, sick or dying, if a doctor fails to respond quickly to their hurried calls for relief. Of the physicians of New Orleans, four-fifths are our graduates; of the registered M.D.'s in Louisiana



(outside of New Orleans) from one-third to one-half are our graduates; a large proportion of the reputable physicians of Mississippi and Texas, and a considerable portion of those in Alabama, Florida, Georgia and Arkansas are our graduates, and we have some in nearly every State and Territory, as also in Canada, Mexico, the Philippines, Cuba, Panama, South America and Europe, so that, go where you may, you will probably find a fellow-alumnus to welcome you.

The number of our graduates in official service is very great and constantly increasing. The enumeration of some of their official duties should contribute to a better appreciation by the public of the great benefits conferred on humanity by medical education. The Charity Hospital is the pride of Louisiana; it relieves 30,000 sick annually; the relief given has been for many years and is still due, with rare exceptions, to our graduates, who, not only nearly monopolize the medical service, but also contribute some members to the Board of Administration, thereby notably promoting the admirable administration of this hospital. Numerous other public and private hospitals in this and other States have among their medical attendants many of our graduates.

Public and private asylums for the insane are indispensable to the common welfare. These are controlled not only in Jackson and in New Orleans by our graduates, but also in other States and cities. Many of the coroners of this and other States are our graduates, who thereby contribute to protecting the public from criminals.

Life insurance has rescued many thousands of widows and orphans from destitution and its accompanying suffering and demoralization; many hundreds of our graduates are the medical examiners of many life insurance companies, and without the approval of these examiners, no life can be insured.

State Medical Examining Boards are contributing to protecting the public from the very grave injuries inflicted by pretenders to medical knowledge, and our graduates are found in numbers on these boards, not only in Louisiana, but also in other States.

The members and officers of the Louisiana Board of Health, of its quarantine stations, and of the New Orleans Board of Health, are, with few exceptions, our graduates, who are also to be found serving the public in similar offices in other States and cities.

We have many graduates in pharmacy, who contribute to the

general welfare, by protecting the public from poisonous and fraudulent drugs.

Our graduates are to be found serving the public, not only in many States, but also in the Federal Army, Navy, and Marine Hospital and Public Health service. The United States Sanitary Commission for the Panama Canal, is composed of three of the most eminent sanitarians in our country, and one of these, Dr. Ross of the Navy, is our graduate.

Nearly all of the professors and teachers of the Medical Department, of the New Orleans Polyclinic, and of the training schools for nurses in this city, are our graduates, and many of these are professors and teachers in other colleges and schools, as far as New York, Philadelphia and Denver.

Our graduates and students have had only two opportunities, during my official service, to serve the public in war. In 1861 our college had 404 students; then the war between the States began, and we had only 94 students left in 1862, indicating that over 300 students had exchanged books for arms in defense of the brave and patriotic Confederacy. Many of our graduates were killed in battle and many more were wounded and disabled.

The three months war with Spain, in 1898, secured fifty-five of our graduates as medical officers, probably the greatest number contributed by any medical college, and many of our students served as hospital stewards.

The careers of preceding graduates will be your own, and your teachers are confident that you will, by promoting the public welfare, gain success for yourselves. In bidding you farewell the faculty congratulates you cordially on the attainment of your diplomas, tenders you their best wishes for your happiness, and urges every one of you, not to be content with the respect your diploma confers on you, but by your own professional worth and usefulness, to augment the value of your own and of every diploma, thereby greatly promoting the fixed purpose of the faculty to render it, year by year, a greater and greater honor to be an alumnus of the Medical Department of the Tulane University of Louisiana.

**Ptosis and the Operation of Motaïs.\***

By HENRY DICKSON BRUNS, M. D.,

Professor of Diseases of the Eye, New Orleans Polyclinic; Surgeon in charge of Eye Department, Eye, Ear, Nose and Throat Hospital, New Orleans.

Ptosis (falling of the upper lid) is congenital or acquired. In either case the patient instinctively makes use of the frontalis to raise the lid, at the same time throwing the head back to increase the effect, getting thus the oft-described, characteristic appearance. Acquired ptosis may be due to a lesion of that branch of the motor oculi supplying the levator palpebrae alone, or the whole nerve may be affected, in which case one or more other muscles of the eye (straight internal, superior and inferior, the inferior oblique and the ciliary muscle and sphincter of the iris) are also paralyzed. If an acquired ptosis be recent it is often amenable to treatment, for it is usually of syphilitic origin; by far the most fertile source of paralysis of the ocular nerves, including the optic, in my experience. Rheumatism and exposure of the side of the face to cold drafts of air are also given in the text-books as causes. I have seen a few cases which could be reasonably set down in the first category, but none that I felt sure could be assigned to the second. Not a few are traumatic.

Fuchs speaks of a variety of ptosis which develops without known causes in middle-aged women. It is always bilateral and develops so slowly that vision is not interfered with until after many years. It is not a paralysis, he says, but a primary atrophy of the muscle itself which is present. It is probable that my fifth case is one of this sort.

Of 21,139 cases seen and tabulated at the Eye, Ear, Nose and Throat Hospital, of New Orleans, during the past eleven years, only twenty were cases of uncomplicated ptosis (.0009+%), including all of whatever etiology—three were traumatic. Nine were white, eleven of negro blood, 55 per cent; the normal attendance of persons of color at my clinic is about 40 per cent. This decided preponderance of that race, even among so small a number of cases, speaks emphatically in favor of a syphilitic origin; especially as the preponderance is kept up in those diseases we know to be often syphilitic: the iris, the optic nerve and the paralyses of the other orbital muscles. Fifteen were males, five females. The youngest was a congenital case in a child of seven; the oldest

---

\*Read before the Texas State Medical Society, April 27, 1904.

was 64 years of age. The average age of all the cases was 31 years, which bespeaks liability at no particular time of life. Two were treated successfully. One recovered in one month on large doses of potassium iodide and the use of Faradic electricity; the other was discharged cured after 170 days of treatment with large doses of potassium iodide and inunction with Arlt's salve. In both hospital and private practice I have long since come to prefer the use of mercury by inunction, in the form of Arlt's salve, a formula too long fallen into undeserved neglect. It is composed of an ounce of the officinal mercurial ointment well rubbed up with a drachm of the extract of belladonna. If there be pain in the eye, or if it be necessary to assure ourselves that the patient is really getting the inunction prescribed, an important point in the forehead and a bandage applied. Otherwise it may be rubbed in at any of the usual points. It is needless to say that in a hospital where 40 per cent of the patients are of negro blood large quantities of the remedy are used, still we are untroubled by the disgusting accident of salivation; yet this distressing state is often brought about by vigorous inunction with mercurial salve without the addition of the belladonna. The potassium of iodide is always given pure in water and taken highly diluted. In the great majority of instances it is better borne this way than when mixed with excipients. No fixed dose is given, but the amount is gradually increased until the limit of toleration is reached. It is then discontinued for two or three weeks, to be resumed again at the end of that time. I am satisfied that unless the patient can take the iodide in large doses no brilliant results may be expected from its exhibition.

In a recent paper, De Wecker, out of the wealth of his experience, recommends that the drugs be used alternately in courses of two weeks, the patient making use of the inunctions while resting from the iodide and taking the iodide while resting from the inunctions. I have often followed this practice and believe it to be the best plan of administration. The Turkish, or where this cannot be had, the hot bath and sweat, the hypodermatic use of pilocarpine and the free drinking of water, if the patient's general health and strength permit, are excellent adjuvants. It is needless to say that water will be more regularly and freely taken if any one of the excellent mineral waters now generally available be prescribed. This therapeusis, of course, ap-



plies equally well to the treatment of paralysis of any of the -orbital muscles, or, indeed, of any of the syphilitic diseases of the eye. In rheumatic cases we would certainly try the effect of large doses of the salicylates.

Unfortunately the class who seek hospitals for relief, usually apply at so late a day that no thought of therapeutic rescue can be entertained. In these cases of long standing acquired ptosis, as well as in the congenital cases, surgery alone holds out a hope of relief. Congenital ptosis depends upon absence or ill development of the levator p. superioris, or in some instances of the centre presiding over the nerve branch supplying the muscle.

The operation proposed by Von Graefe consists of excising a lanceolate portion of the skin and obicularis of the affected lid, but the effect and relief produced are but slight. The well known operation of Panas, of late the one most employed, in which a tongue, formed from the skin of the lid, is sewed under another undermined portion of skin between the upper end of the tongue and the upper margin of the eyebrow, gives relief, but is objectionable for more than one reason. In the first place uncovering of the pupil is only to be effected by the same hyper-elevation of the brow, by action of the occipito-frontalis, that has already disfigured the patient. It is but an awkward substitution of the physiological action of one muscle for another. In the second place, the grafting of one portion of skin still covered with its epithelium beneath the raw surface of another is un-surgical and occasionally leads to unpleasant results. All operations which by means of buried sutures or by shortening the tarso-orbital fascia connect the tarsus with the frontalis, accomplish their purpose in the same way. While they may be free from the objection of passing an epithelium-covered flap beneath the skin, they attain this only at the expense of leaving silver wire (Mules) or sutures of other material buried in the wound. (Wilder, *Annals of Ophth.*, Vol. VIII, No. 1, January, 1898.

The operations of Everbusch and Hugo Wolff for advancement of the levator are much more physiological, but it is evident that it would be useless to advance the completely paralyzed muscle of a long-standing acquired, or the ill-developed or un-inervated one of a congenital ptosis. Certainly it would be embarrassing to attempt such procedure only to find that the muscle was entirely ab-

sent! Nevertheless, I do not doubt that under such circumstances these operations may have been of benefit, not by accomplishing the purpose originally intended, but by shortening the tarso-orbital fascia and so giving to the frontalis better control of the lid.

Such an advancement should, however, be the operation preferred in recent traumatic ptosis, where we had reason to believe that the muscle or its tendon had been cut or torn from its attachment (Charles A. Oliver)—Resection and advancement of the levator p. muscle in traumatic ptosis. (*University Med. Mag.*, Oct. 1897).

The unphysiological nature of these procedures and the objections and the difficulties often in the way of obtaining a fully satisfactory result, had long given me cause for reflection. When, therefore, in 1899, I first read in the *Recueil d'Ophthalmologie* a paper by Motais describing his operation, its boldness of conception, its physiological nature and beautiful delicacy of technique at once appealed strongly and I determined to try it at the first opportunity. The essential feature of this method consists in the grafting of a slip from the tendon of the superior rectus into the lid between the skin and the tarsus. I understand that some surgeons have made certain modifications in the manner of accomplishing this and have permitted the modified operation to be called by their name. This seems to me entirely reprehensible, and I agree with a confrère of Motais who has well said: "Be the procedure what it may, the moment it is a question of grafting a slip from the superior rectus into the paralyzed lid the operation is that of Motais." The plan of the operation is very simple. The usual aseptic precautions having been taken, the eye is well soaked with four per cent cocaine and 1 to 1000 adrenalin, then washed with 10 per cent argyrol and lastly with normal salt solution. A short distance above the upper margin of the cornea, over the insertion of the superior rectus (7.7 mm., Fuchs), an incision entirely through the conjunctiva is extended upward as far as possible, an assistant holding the lid back and away from the ball with a retractor or his finger; the lid is then everted and the incision continued through the cul de sac to the very margin of the tarsus. The conjunctiva is dissected up at each side of the incision and then well retracted so as to expose the tendon of the superior rectus thoroughly. A strabismus hook is passed beneath the tendon,

a ſnip of the ſciſſors on its end, through the capsule of Tenon, allowing it to paſſ freely from ſide to ſide until the tendon lies upon its ſhank. It is then pulled forward, to the inſertion upon the ſclera, and backward, toward the equator of the ball, ſo as to rip up the tendon as completely as poſſible. A fine, but ſtrong ſilk ligature, armed at each end with a ſmall curved needle, is now paſſed through the tendon held on the ſtrabismus hook, from without toward the ſclera and then out again, in ſuch a manner as to embrace the middle third of the tendon as cloſe to its inſertion as may be. The ligature is immediately firmly tied down. With fine ſciſſors the bit encircled by the ligature is now diſſected out of the inſertion of the tendon and the inciſſions prolonged upward until a narrow ſlip, or tongue, comprising about the middle third of the tendon in width, and as long as may be without cutting into the belly of the muſcle, is isolated. This is held at its free end by the double-needled ligature and unleſs the hold be firm and not likely to ſlip the ſucceſs of the whole operation is imperiled. If there be any riſk of this, the tip of the ſlip had better be doubled back upon itſelf a ſhort diſtance and the ligature tied tightly around the double portion once more. The lid being once again everted by the ſurgeon, the tip of his left forefinger being upon the ſkin overlying the tarsus, with a blunt pointed ſciſſors a diſſection is freely made between ſkin and tarsus, beginning at the point where the original inciſion through the conjunctiva met the ſuperior margin of the tarsus and continuing down to the free edge of the lid at its central point. With the lid ſtill held everted on the ſurgeon's finger, one of the needles carrying the ligature made faſt to the tendon ſlip is now paſſed between the tarsus and the ſkin and is made to emerge through the ſkin of the lid at about 1-16 of an inch from its free margin; the ſecond needle is paſſed in the ſame way and emerges through the ſkin at the ſame diſtance from the free lid-edge as the firſt, but about  $\frac{1}{8}$  inch away—nearer the outer or inner canthus, as the caſe may be. By now drawing equally on the two threads, with little ſettling jerks and pulls, the tendinous ſlip is made to leave the plane of the levator and paſſ between the tarsus and the ſkin until its tip lies under the ſkin juſt above and near the center of the free lid-edge. The ſlip is then made faſt by tying the two threads over a very ſmall roll of aſeptic gauze. The end of the gauze and the



eyelashes had better be cut close to the lid-edge to prevent by any chance their rubbing against the exposed cornea. For, if the operation has been properly performed, the lid is now much puckered and drawn up at its central portion; as would be a drop curtain with a drawing string run through the middle of its width. The pupil is disclosed and the patient hardly able to cover the cornea by his own effort. For, in this, as in all operations on the lids, the immediate effect must be greatly exaggerated—almost a caricature—if we wish the final result to be efficient and satisfactory. The lid being now well drawn away from the eyeball (not everted), the conjunctival wound is closed by three or four points of suture equally distributed between the corneal margin and the upper margin of the tarsus. This last suture passing through the loose conjunctiva of the cul de sac should be applied with especial care and should take a rather deep, wide hold in the membrane on each side of the wound; indeed, two sutures should be applied if good approximation cannot be had with one, for one of the accidents described by foreign operators is prolapse of the fornix conjunctivæ. (See Oliver's case of traumatic ptosis, *loc. cit.*) Care must be taken not to involve the grafted tendon-slip in these conjunctival stitches; at the same time it must be neatly covered over. Finally argyrol (10 per cent.) is abundantly instilled, the lid drawn down and covered with a disc of sterile gauze soaked in the same solution and all held in place by absorbent cotton packing and an elastic flannel bandage. This it is my present custom to remove on the next day, when the eye is thoroughly cleansed with a borax-boracic acid wash and the argyrol dressing again applied. After two or three days, if the patient be of an age and temperament to be trusted not to rub or otherwise interfere with his eye, the dressing is discontinued except at night, or a cataract cage may be substituted, and the argyrol solution is used every hour. On the fifth or seventh day the ligature is clipped, and if this is carefully done at one point it may be drawn away entire, including the knot.

I have done this operation five times since 1899, always in my hospital service, and so far as I know these are the first which have been done on this side of the Atlantic; at least I have met with no published cases. In my first case, a negro man of about thirty-five, with acquired ptosis on one side, I tied the ligature on







**DR. BRUNS' CASES.**

Upper is case No. 4. R. E. shows Mota's operation for congenital ptosis. Photo after 90 days. Lower is case No. 5. R. E. shows Mota's operation for acquired ptosis, 14 days after operation. L. E. shows condition before operation.

the inside—conjunctival surface—of the lid, and kept the eye bandaged several days; following the original directions of Motais. To my chagrin I found on removing the dressing a deep ulcer near the center of the cornea. It was before the days of argyol and when the ulcer was healed, at the end of about a month, a dense central leucoma remained and the eye was quite useless, although the lid was very well raised. I proposed an iridectomy, but the patient, having tasted the quality of my surgery, was not anxious for more, and disappeared from the clinic.

My second case was a middle-aged negro woman, with one sided acquired ptosis also. You may be sure that this time I tied the ligature on the skin surface of the lid; a practice, as I see from a later publication, Motais had soon been driven to also. Healing was uneventful, but I had not drawn down the end of the slip close enough to the free edge of the lid, had not sufficiently exaggerated the immediate result, and not more than one-sixth of the normal pupil was uncovered. The paralysis was of long standing, and there was much redundant, puckered skin in the upper lid. I believed the result of the operation could have been made perfect, by the incision of a properly proportioned leaf-shaped bit of skin between the upper edge of the tarsus and the brow, and proposed this to the patient; but, just the opposite of Byron's lady, she consented promptly enough, and then after postponing the operation on one excuse or another for five months, finally "ne'er consented," but took herself off.

The third case was a comparatively young negro man with acquired ptosis, and the operator having profited by his former experiences, the operation seemed to be entirely successful, but as he ran away before the end of the second week, the case cannot be justly recorded, either as a success or a failure.

Case No. 4 is that of G. S., a quadroon child of eight years, with congenital ptosis of the right lid. Her appearance and general health are good. Vision R. E. =  $20/\overline{XL}$  L. E. =  $20/\overline{XX}$  the lid of the right eye being held up with the finger. On December 15, 1904, she was operated on under chloroform, with the immediate result of lifting the lid three-fourths as much as its fellow.

Healing was uneventful; the dressing was discontinued after twenty-four hours and argyol instilled every hour. The ligature was removed about the sixth day. The accompanying photograph showing the result was taken about the 90th day after the operation.

It will be seen that the upper third of the pupil is still covered, but as the effect has gradually increased, as redundant folds of skin in the lid have slowly disappeared, and as the mother informs me that the eye is not quite closed in sleep, though the cornea is well rolled up and covered, there is no question of increasing the effect by the excision of any skin from the lid.

The child sees well, looking straight forward, up, or down as in reading. An interesting point in this case is that the vision of the R. E. upon admission was recorded as  $2^{\circ}/\overline{XL}$ ; on January 3, it is recorded as  $2^{\circ}/\overline{xxx}$ : while on March the 10th, when she plained she did not see so well, it was found to be R. E.  $= 2^{\circ}/\overline{Lxx}$  and L. E.  $= 2^{\circ}/\overline{xx}$  and examination with the ophthalmometer showed R. E.<sup>2</sup> ax  $90^{\circ}$ , L. E.  $1^{\circ}$  ax  $90^{\circ}$ . After repeated installations of atropine (1%) V. R. E., is now with  $+3^s = +2^{\circ}$  ax  $90^{\circ} = 2^{\circ}/\overline{xxx}$ .

My last case, No. 5, is J. G., a light mulatto woman, aged 62. Her general health and appearance are good for her age. Vision R.  $= 2^{\circ}/\overline{xxx}$  L.;  $= 2^{\circ}/\overline{xx}$ , the lids being held up. The affliction came on gradually fourteen years ago. The paralysis is so complete that to obtain even the little useful vision she has she is obliged to exert the frontalis to the utmost, and to carry her head far tilted back. On March 9th, 1905, under cocaine and adrenalin anaesthesia, she was operated upon with the infliction of but little pain. On the day following the operation the dressings were renewed. On March 11th dressings were altogether discarded, and argyol instilled every half hour. On the 8th day the ligature was removed and the conjunctival sutures came away. The photograph, taken a day or two later, shows well the complete uncovering of the pupil of the right eye, and the former condition, illustrated by the left eye as yet unoperated upon. It is seen that there are redundant folds in the lid, but my experience with both Case 2 and Case 4 shows that these decrease in time, while the habitual position and the appearance of the lid improve. The forehead is still wrinkled by the action of the frontalis, as one might expect after 14 years of incessant contraction, but this is no longer necessary, for the lid is just as well elevated when the brow is held down as forcibly as possible with the thumb. Indeed it is interesting to observe that relaxation is already beginning. Though only ten days have passed since the operation, the right eyebrow is not as raised as the left, and the associated eleva-



tion of the right corner of the mouth, with accompanying wrinkling of the whole side of the face is wanting. It is evident that looking straight forward the patient sees perfectly well; looking down she can read, write or sew, and the superior rectus being relaxed, the lid follows naturally the movement of the ball; on looking up, on the other hand, the muscle being most contracted the lid is forcibly raised and is carried well out of the path of the line of sight. Herein this operation surpasses any other that has been proposed; herein it is excellent where they are deficient, for in all of them the lid lags behind when the eye is directed upward, in spite of all the frontalis can do. Indeed a complicating paralysis of the superior rectus is the only contra indication I know to the operation of Motais. When this is present we must fall back upon the old Panas method, upon advancement of the levator, or upon shortening of the tarso-orbital fascia.

---

### **Genu-Varum and Valgum, Corrected by Osteotomy.**

E. DENEGRÉ MARTIN, M. D., New Orleans.

Rickets, or Rachitis, is essentially a disease of early childhood, and seems to have a predilection for the bones. The condition is supposed to result from an absence or diminution of certain bone salts. The cause is even now doubtful; it is generally believed that it is due to the lack of sufficient consumption of calcium with the food. Hagenbach believes it is due to infection. Kassowitz attributes it to an inflow of plasma, resulting from abnormal vascularization, which impedes the formation of calcium. He attributes the condition to vitiated air, and his observations would tend to show an increase of the disease towards the end of winter, after children have been kept indoors, on account of the cold weather, and forced to inhale vitiated air. Many other theories are advanced, but it is generally conceded that it is due to mal-nutrition.

Viewing the subject from a surgical standpoint, we will deal with the objective, rather than the subjective symptoms. Although it is my intention to show the effects of the disease on the lower extremities, and the treatment of these deformities, yet two of these patients show well marked types of rachitis in all its forms, large skull, square forehead, and I have no doubt that when younger, other more prominent symptoms were well marked. All of the extremities are involved; enlargement of the epiphyses of the

radius and ulna, the condition known as double-jointed, and curvature of the convexity of the shaft, due to muscular action upon the soft bones. In the mild cases, children may recover, the disease is often outgrown, and with proper care, some of the marked curvatures of the extremities disappear.

In the cases present, nothing short of surgical interference could promise any relief, and as you will readily see, the deformities in some were so marked that locomotion was accomplished with the greatest difficulty.

CASE NO. 1. The first pictures presented are skiagraphs, showing the deformities as they exist in both bow-legs and knock-knees, and also points of greatest curvature. It can be readily seen from these skiagraphs, that deformity is not in the joints, as it was at one time supposed, and that the operation suggested by Ogston, was not the best means of correcting the trouble. It will be noticed in the case of bow-legs, that the greatest curvature is immediately above the condyles and below the head of the tibia, requiring a double operation for the correction of these deformities, whereas, in the cases of genu-valgum, the deformity is just the opposite. The first case presented is that of a boy five years of age, with genu-valgum of both legs, and anterior curvature of both tibiae. This boy walked with difficulty, and it was impossible for him to run on account of the over-lapping of the knees. To correct the existing conditions, it was at first necessary to do an osteotomy of both tibiae. The site of the operation is shown by the scars. The deformity in the femur was next corrected by an osteotomy, with the result as shown by the accompanying photograph. The bandages on the legs should have been removed, as the condition from which the patient was suffering at the time, an inguinal adenitis, had nothing to do with the operation. This patient had an enlargement of the epiphyses of all the long bones, as well as the characteristic deformities of the cranium.

CASE NO. 2 is a colored girl, four years of age, with genu-valgum of left leg and slightly compensatory bowing of the right leg. In this case, so great was the deformity, that the leg was almost at right angles to the thigh. The deformity is not fully shown here as the photograph is badly taken. The accompanying cut shows the result, which I hope to further improve at some future time. This was also corrected by osteotomy.

CASE NO. 3 is a male, five years of age, with genu-varum (pot-

*New Orleans Medical and Surgical Journal,*  
*June, 1905.*



FIG. 1—CASE I.





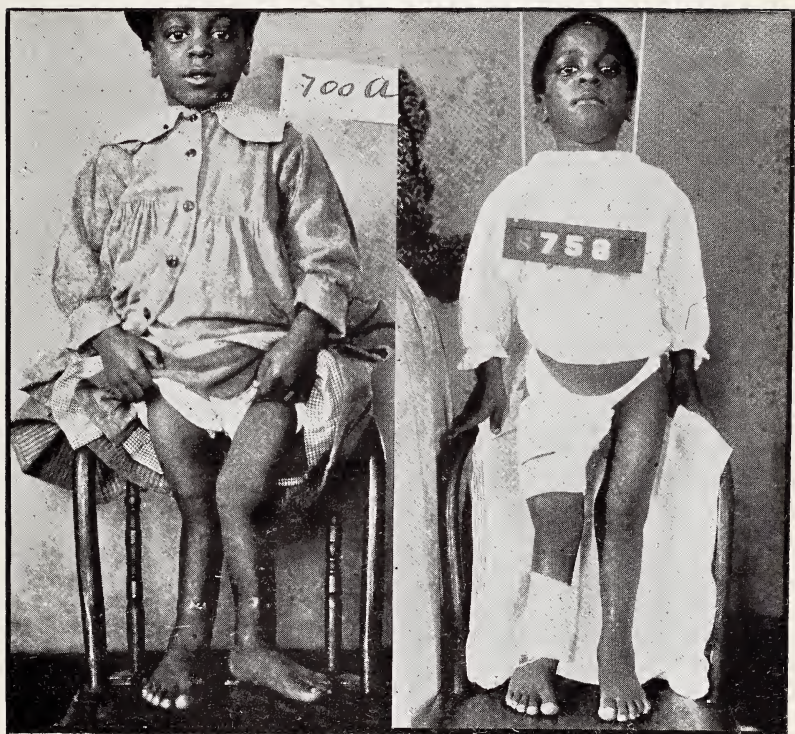


FIG. 2—CASE I.



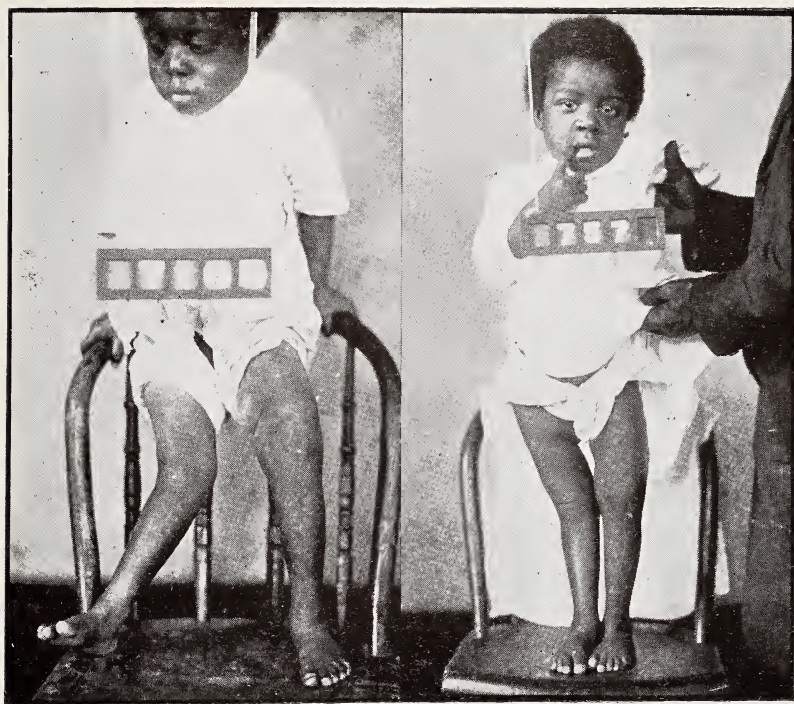


FIG. 3—CASE II,







FIG. 4—CASE III.







FIG. 5—CASE IV.





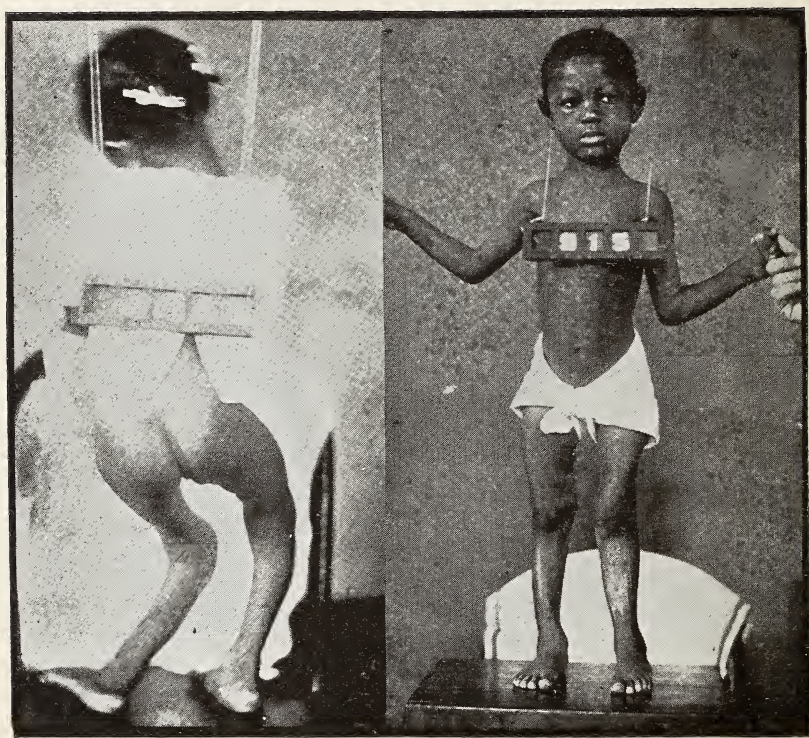


FIG. 6—CASE V.

hook legs.) In this case an osteotomy of both femurs was performed, but the Risoli osteoclast was used to fracture the tibia. I had not used this instrument before, as I had had little experience with it, and it is rather a bunglesome instrument at best.

CASE No. 4 is also one of bow-legs. Here it was likewise necessary to perform an osteotomy upon both the femur and tibia, with the result as shown in the accompanying photograph.

CASE No. 5 is a colored girl, five years of age, with marked deformity of both legs, as shown by the photograph, as well as a curvature of the spine. This child, as will be seen by the picture is terribly deformed, but after repeated operations, the result as shown in the accompanying photograph was obtained.

This was really a far greater improvement than I had hoped for in the beginning. The deformity was such that she managed to get around with the greatest difficulty, but before being discharged from the ward, she could walk and run with as much ease as any child.

These cases represent some of the worst types of the deformities of the lower extremities produced by rickets. My reasons for doing these operations with the chisel, instead of the osteoclast, was simply because I found the Risoli instrument, which is shown in the accompanying cut, very bunglesome. It is impossible with this

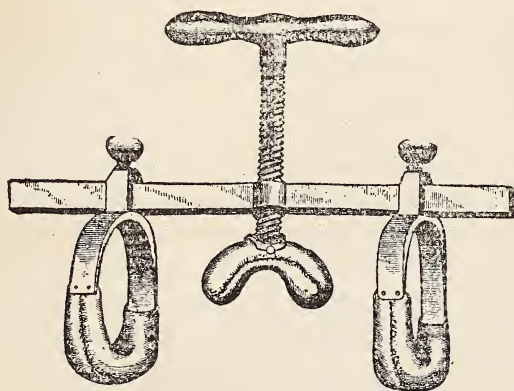


Fig. 7.

instrument to place the point of resistance so as to fracture the bone near the epiphysis.

The next cut shows the Grattan osteoclast, which is a more perfect instrument, and which appeals to me as the best of its class,

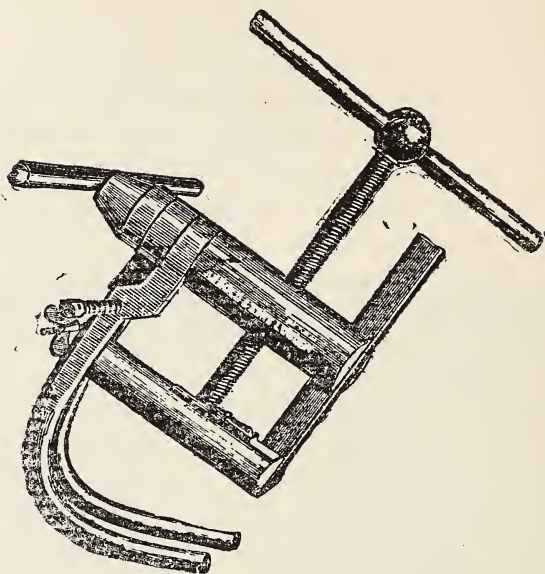


Fig. 8.

and for the knowledge of which, I am indebted to Dr. John Ridlon. With this instrument it is possible to fracture the bones within an inch of the epiphyses, rendering the operation simpler and far less dangerous.

These cases were all treated with plaster splints, and none of them used braces after the plaster was removed.

Of the various points selected by the different operators for fracturing the bone, I believe that the point of election by Maccewen is the best. It is the nearest point at which the femur can be fractured above the condyles, and this is usually where the greatest deformity exists, prior to operation, and where the least deformity will result after. Maccewn's suggestion of cutting from the inner side, and removing a wedge-shaped piece of bone, is an error. Hahn's suggestion of cutting from the outer side in genu-valgum, is much more practical. It is only necessary to drive the chisel through two-thirds of the bone, when it can be fractured without displacement, put in the over-corrected position and secured in plaster.

The results in all of my cases have been most gratifying. I am greatly indebted to Dr. Edmund Moss for his valuable assistance in this work.



## Society Proceedings.

---

### Orleans Parish Medical Society.

---

*President*, DR. L. G. LEBEUF.

*Secretary*, DR. ALLAN EUSTIS.

141 Elk Place, New Orleans.

In charge of the Publication Committee, DR. ALLAN EUSTIS, Chairman,  
DRS. JULES LAZARD and H. DUPUY.

---

MEETING OF APRIL 8, 1905.

DR. J. A. DANNA read a paper entitled

#### **"Fracture of the Patella; Report of Five Cases."\***

The subject of fracture of the patella has been very thoroughly discussed by many surgeons in recent years. Many different methods have been devised for its treatment, into the details of which I will not enter. I wish to relate my experience with five cases, with the hope that it may add some little material to the literature already accumulated on the subject. The first patient that I have to report I saw on February 20, 1903. My experiences as a student and practitioner had taught me that the treatment of fractures of the patella by means of splints and other external retentive appliances had not given complete satisfaction. I had seen several cases operated upon and the fragments wired or brought together by kangaroo tendon sutures passed through the bone substances, but here again I had seen some very disastrous results. Some of the cases coming under my observation had proved fatal from septic infection during the operation. I also learned from my observation of the open operation in these cases, first, that it was impossible in some cases to bring the fragments into accurate apposition by an external manipulation—owing to the obliquity of the fragment in some cases, and owing to the interposition between the fragments of the torn edges of the periosteum and fibrous capsule of the bone in every case I saw. I was rather led to the conviction that some form of open operation that brought the fragments into exact position was the proper thing to do in these

---

\*Two of the cases exhibited before the Society.

cases, but the danger of septic infection and its probable disastrous results had also been well impressed upon me by some of the cases that I had observed. It was with a great deal of trepidation, therefore, that I undertook my first operation on the first fracture of the patella that I had occasion to treat. I will relate my cases and describe my procedure as I go along. I do not claim any priority as to what I have done in these cases for our Dr. Matas, in the discussion of fracture of the patella, at the meeting of the Louisiana State Medical Society, in 1901, stated the essential points to be borne in mind in these operations, of which I was, however, ignorant up to a few days ago. Since then Buedinger, of Vienna, has reported two cases in which the same method was used and Blake, of New York, at the last meeting of the American Medical Association, read a very interesting paper on the treatment of fracture of the patella by lateral sutures which brought forth a great deal of discussion and approbation.

CASE. 1: Sam Odom, age 25, colored, fell off a freight car on the afternoon of February 20, 1903, and sustained a fracture of the patella of left side. Brought in hospital six hours later, presenting a somewhat swollen and tense knee with the patella broken transversely across into about two equal halves. Bearing in mind the great importance of asepsis in these cases, I ordered the limb, at the knee, and for some distance above and below, to be prepared with the same care and thoroughness as in an abdominal operation. Under chloroform anesthesia I made a longitudinal incision about four inches in length and exposed the broken fragments, which were slightly separated and inverted, with the bone capsule dipping over the edge of the fragments and interposed between them. The joint cavity was filled with blood clots which I washed away. The fragments were now everted, their broken surfaces wiped clear of clots, the edges of capsules peeled off and turned over and four sutures of kangaroo tendon were passed through these edges and tied. This brought the fragments into exact apposition, but there was considerable tension on the sutures. One suture was now placed through the joint capsule on either side of the broken fragments and tied, and the tension on the other sutures thus almost entirely relieved. The incision was now closed with silk-worm gut sutures and a sterile gauze dressing and a pasteboard splint applied so as to immobilize the knee in extension. The splint was removed in two

weeks and the dressing changed and external sutures removed, the wound having healed by primary union. He was allowed to sit up on the twenty-sixth day and stand on the foot and he deserted the same day, splint and all, walked off and I have never heard of him since.

CASE 2: Mrs. J., admitted May, 1904 with a history of a fall down a stairway two days previous and presenting a swollen, painful knee with inability to extend the leg. Examination revealed a transverse fracture of the patella at junction of lower and middle thirds. An operation was advised and after thorough sterilization of the parts, a longitudinal incision of about four inches was made over the center of the patella through skin and fascia and the broken fragments exposed. The lower fragment was tilted downward so that its broken surface pointed somewhat forward and was exposed to view, this being due to a slight obliquity of the fracture, the line of fracture being backward and upward. The broken surface of the upper fragment was not exposed, but was directed toward the joint surface, this fragment being tilted in the opposite direction to the lower fragment. Thus an approximation of these fragments by external manipulation would cause an overriding of the lower over the upper fragment. There was a separation of about half an inch and the capsule of the knee joint was torn as far around as my incision permitted me to see. After washing out all blood and blood clots with hot normal saline solution and freshening the broken surfaces by scraping off a fibrinous exudate that had already been thrown out, I peeled the edge of torn periosteum from over the edge of each fragment and brought it together with four interrupted kangaroo tendon sutures and put in two sutures of stout catgut to bring together the joint capsule on either side. The fragments were thus brought into accurate apposition, and after tying my two sutures on either side of the patella there was absolutely no strain on the sutures over the patella itself. The incision was now sutured with silk-worm gut sutures and after the application of a sterile dressing the limb was immobilized with a posterior gutter pasteboard splint. On the sixth day after the operation she developed some temperature and complained of some pain. The dressing was removed and two sutures in the center of the incision removed. There was an escape of a small quantity of pus which seemed to come from under the subcutaneous fascia. The deeper sutures were not disturbed. The pus cavity was washed and

packed with gauze. Suppuration continued, however, and spread, necessitating the making of a counter opening through the skin and fascia on either side of the knee, a drainage tube being inserted through each opening and out through the original incision. She seemed to have little resisting power, however, for the pus spread upward and I had to make another incision some days later on the inner aspect of the thigh about three inches above the knee. A slow process of suppuration kept up thus for weeks, her temperature never rising above 101. Gradually she eventually improved, however, and she was able to sit up in about three months.

I was afraid to perform passive motions of the knee at first for fear that the suppurating process had weakened the line of suture and movement of the limb might cause it to tear and permit the pus to get into the joint cavity. Later, as the granulating pus cavity began to cicatrize, manipulations, when tried, were very painful and were put off till later, when the parts had practically healed. It was now found that cicatricial contractions had caused almost complete anklyosis of the joint, there being but a small range of movement. Forcible movements and massage were instituted, however, but were not relished by the patient, who left after a few days. I never heard any more of her till I looked her up a few weeks ago and found her knee practically completely ankylosed. Though she had been requested to return for treatment she had not done so and had entirely neglected to do anything for herself.

CASE 3: A. P. M., age 45 years. Slipped from the steps of a car on July 19, 1904. When seen an hour after the injury he presented a very swollen tense knee with inability to extend the leg. The two fragments of broken patella could be felt floating in the effusion and separated by an interval of about three-quarters of an inch. He readily consented to an operation after an explanation of his injury and the nature and danger of the operation. My experience with the last case having impressed upon me the value of asepsis and primary union, I supervised myself the preparation of the field of operation and saw that as much care was taken in preparing the limb as is usually taken in preparing the abdomen for a clean intraperitoneal operation. I learned another lesson in the previous case,—the difficulty of drainage of the parts through a longitudinal median incision. I therefore in this case made a transverse incision of about four inches in length over the site of



the fracture and was thus enabled to get a much better view of the anterior aspect of the knee joint than I had with the longitudinal incision.

The fractured bone was now exposed, in two equal halves, broken squarely across, separated about three-quarters of an inch, the periosteum and fibrous capsule ragged at the edge and inverted over the broken surfaces. The joint capsule was torn on either side to the extent of exposing one-half the circumference of the joint. There was a large quantity of fluid and clotted blood, which was washed out with hot normal saline solution and the broken fragments brought together by interrupted kangaroo tendon sutures and three interrupted chromicized cat-gut sutures were placed on either side, bringing together the edges of joint capsule. The skin and fascia were now brought together with interrupted silk-worm gut sutures, and fearing a possibility of infection, and particularly as there had been so much extravasation and dissection of blood under the skin and fascia for some distance around the joint above and below, I placed a small gauze drain in either end of my incision, going down to the joint but not into it. This proved later to have been a very wise procedure, for when I removed the dressing at the end of four days, he having developed a temperature of 101, I found that the gauze had drained the subcutaneous structures, but the joint was somewhat swollen and tense. I inserted a blunt artery forceps into the drainage canal, pushing into the joint, and, opening it slightly, allowed the escape of several ounces of cloudy serum. I did the same on either side and replaced the gauze drain pushing it, however, into the joint. The case was dressed every other day now for about ten days, the secretion from the joint being very profuse at first, but gradually diminishing, so that about the fifteenth day I was able to dispense with the drain. Passive motion of the joint was now instituted and repeated every two or three days, together with bathing with warm water and some attempt at massage in a small way. At the end of three weeks he was allowed to get up and walk around with a posterior splint on and cautioned against a possibility of bringing any strain on the patella. At five weeks the splint was also dispensed with and he was permitted free use of the limb with the caution not to forcibly extend his leg or bear his weight on the leg in flexion, or in any manner put any strain on the patella. Three weeks later he was told to run around as he

pleased, which he has done ever since, and though he had some difficulty at first in going down stairs on both legs alternately, he now walks as well as ever. I present him to you to-night for your observation.

CASE 4: A. A.—Carpenter—Slipped in an alleyway on September 9, 1904. I saw him about two hours after the injury and he presented the swollen tense knee and inability to flex the leg. He readily consented to an operation. The same incision and operative technique was followed in this as in Case 3 preceding. The conditions found were about the same, except that the fracture was more obliquely directed, upward and backward, and the perisoteum and fibrous capsule of patella was much more frayed and inverted. The sutures brought it into exact apposition, however, and after tying sutures on either side of the patella there was no tension on line of sutures whatever. I drained, as in the last case, except that my gauze wick went right down into the joint. There was considerable drainage of serum for about ten days, gradually diminishing in quantity. At the end of that time the drains were dispensed with. Passive motion was commenced about the eighteenth day and kept up with warm bathing and massage every two or three days. He was allowed to walk around on the twenty-first day and dispensed with the splint after five weeks. He was cautioned against putting any strain on the patella for several weeks following, after which time he resumed his vocation and can now work as well as ever except that he is afraid to trust himself in coming down a ladder. With this man the transverse incision has the additional advantage in that in kneeling, as he is often required to do, the scar is not pressed upon at all, whereas with the longitudinal incision it would be. I also present this case to you for observation.

CASE 5: W. P. B.—Age 22, a young man of rather happy disposition, while out having a good time one night, fell, he knew not how, and refractured his left patella. This case is of special interest from the fact that three months previously he fractured the same bone and was operated on in Vicksburg, Miss., where a subcutaneous pedicle silk suture was introduced around the patella, and was broken by the second fracture and removed by me, at the subsequent operation. He was in a high degree of intoxication at the time and I decided to put the operation off till the next day, when he readily consented. After due preparation of the parts,

under chloroform anesthesia, a transverse incision was made over the middle of the patella, exposing a fracture at the junction of the lower and middle third of the bone. The broken thread was found subcutaneously, having been broken and loosened by the separation of the fragments. The fracture was much more oblique than any of the others of my series, also directed upward and backward, and the lower fragment was much everted, and the upper somewhat inverted. The broken surfaces had evidently never been in apposition, there being no fresh bleeding or freshening of the surfaces as a result of the recent fracture, and were covered with a thick fibrous exudate that had to be scraped off with a bone curette. This was done with some difficulty and the edge of the periosteum finally freed. The edges of periosteum were brought together by sutures, but it would have been impossible to do so without very great strain on these sutures, which would necessarily have cut through in a couple of days, but for the relaxing effect of suturing the capsule on either side, and which was torn half way around. Owing to the age of the tear and retraction that had taken place this was accomplished with some difficulty and after some dissection. Finally the whole was sutured with interrupted kangaroo tendon sutures. This case was drained and treated as were the other two, with a similiar result, being discharged from the hospital on September 26. My summer vacation caused an interruption of my personal observation of this case, but, though I did not see him myself, he returned two months later and said he was working hard and never gave his leg a thought.

These fractures were all due to indirect violence by forcible muscular action in the attempt to extend the leg in the face of a resisting force. I would not advise operation in cases of fractures due to direct violence where the joint capsule on either side of the joint is not torn, and there is therefore no separation of the fragments. The essential points to bear in mind in operating on these cases are thus put by Dr. Matas: (1) Free access to the broken fragments and torn capsules by a semilunar incision and skin flap, the convexity of which is directed upwards; (2) free irrigation of the joint, to get rid of blood and clots, with sterile saline solution; (3) direct approximation of the broken fragments by elevating and re-adjusting the periosteo-aponeurotic cap which is interposed between the fragments and which is the most constant cause of fail-



ure of osseous union; (4) suture of the torn edge of the capsular ligament with chromicized catgut or fine kangaroo tendon suture, (this is of the greatest importance in maintaining the approximation of the fragments); (5) avoidance of all contact with the joint or deep tissues with the fingers, depending solely upon the sterile instruments for all manipulations. I used a straight transverse incision, which practically answers the same purpose. I would add that it would be criminal to operate on a case except under absolute aseptic conditions. As to suture material, kangaroo tendon or chromicized catgut I consider the best, as they are strong, and eventually, though not rapidly, absorbed. No method of wiring the bones or boring and passing sutures can possibly come anywhere near giving as accurate an approximation as the suture of the periosteal edge of the patella and torn capsular ligament. I believe all cases should be operated on as soon as seen, as nothing can be gained by waiting.

I think all cases should be drained, particularly if there has been much traumatism, or manipulation in or about the joint during operation. I am sure the drainage had much to do with the good results obtained in cases 3, 4 and 5. The insertion of a gauze wick at either end of the incision and going down to the joint is all that is necessary for the purpose. In order to get a good functional result, early passive motion, in the second or third week, and massage later are absolute essentials.

I regret very much that I have been unable for one reason or another to procure X-ray pictures of my cases, but the practical functional results as presented in these two cases will in a way make up the deficiency.

#### DISCUSSION.

DR. PARHAM, in opening the discussion, complimented the doctor upon the admirable results obtained in the cases exhibited. He stated that the results answered the test as formulated by Von Mikulicz, excepting in one particular. Examination of the cases showed perfect functional results—the man being able to extend and flex the limb with normal freedom, and step up and onto a chair and down again to the floor without any difficulty whatsoever. The fragments appear to be perfectly united by bone, but in this respect one requirement of the test had not been fully carried out, that



is to say, no X-ray examination had been made. Some of the cases reported by Von Mikulicz were apparently united by bone, but showed separation under X-ray examination.

The doctor laid great stress upon the necessity for asepsis in operations upon the patella, quoting a formula that had been suggested, "The surgeon should be sure to have perfectly clean hands and act as if they were absolutely dirty;" in other words, enter the wound as far as possible only with instruments.

The first operation in the antiseptic era was done by Cameron in 1877, in the early part of the year; but Lister, in the following October, carried out the first formal operation for suturing the fractured patella. In 1883 he was able to report seven (7) cases of suturing with silver wire. If perfect asepsis is maintained, good results are likely to follow, but the utmost care must be observed, since, in the hands of the best surgeons, serious accidents have occasionally occurred. It is much better, therefore, not to insist that all cases of fractured patella should be sutured, because some can be more safely and as efficiently treated without opening the joint. The classification suggested by Von Mikulicz will aid in limiting the operations to cases that would not do well under mechanical treatment. He classifies them into blow fractures, tear fractures and a combination of the two. For practical purposes all tear and combination fractures should be included under one head. In blow fractures there is little or no injury to the parapatellar ligaments, hence very little displacement, and such cases would give good results treated mechanically without operation; but in blow fractures and combination fractures the indication is to expose the fragments and bring them together by suture. He believes, however, that wiring of the fragments will rarely be necessary. The plan suggested by Dr. Danna and carried out by him in the cases reported represents the most modern and efficient treatment of the fracture. It is much simpler and less traumatizing and quite as efficient as wiring the bone fragments themselves. Therefore, in his opinion, this method should be followed always unless there are excellent reasons for wiring the bones. He believes, however, that it would be better to carry the sutures through the ligaments to the side of the patella on each side first, and having drawn the fragments together by the tying of these sutures, to put in the periosteal sutures over the approximated fragments. It is of practical

importance to be able to recognize a blow fracture from a tear fracture. This was done by examining the action of the quadriceps muscle. If the man can straighten the leg the quadriceps is practically all right and the capsular ligaments are not likely to be much torn, but sometimes the patient will not do this on account of the pain involved. It will then be necessary simply to notice the condition of the quadriceps and its action upon the upper fragment. There are decided advantages in the open operation, namely, the inspection of the fragments, the removal of any interposed membrane, and the possibility of removing by irrigation with normal salt solution any clots that may be in the joint. When proper precautions are taken and the hands are kept as far as possible out of the joint, instruments chiefly being used, the chances of serious accident are much reduced and the operation, by one who has acquired the aseptic habit, will be rendered thoroughly justifiable.

In conclusion he wished to congratulate Dr. Danna upon the admirable results obtained in the two cases presented and to commend heartily the procedure which he had outlined in his paper.

DR. MATAS congratulated Dr. Danna upon the excellent opportunities for observing this particular class of cases and also for the excellent results obtained. Dr. Matas was also very much pleased that his very earnest plea for the treatment of fractures of the patella by open suture of the capsular rents and of the inverted periosteocapsular membrane without drilling the fragments or wiring them in any way,—a plea presented in his paper, "Fractures," before the Louisiana State Medical Society, in 1900, had been so brilliantly sustained by Dr. Danna's experience.

Dr. Matas referred to his earlier experiences with the open method and mentioned a case observed by him in 1896 in which there was fracture of the patella which he had treated by non-operative measures, but with weak knee as a result. Some time after this, April 23, 1899, the patient fractured the other knee and the doctor operated at once, suturing the capsule and parapatellar ligaments, closing the wound without drainage, after which the limb was put up in a plaster cast. The patient was walking on the limb three weeks after the operation. He reported three more cases in which he had sutured the capsule and closed without drainage. He was convinced of the value of capsular suture over drill-

ing of the fragments with wiring, for, in drilling there were unnecessary traumatism and great danger of fracturing the fragment. He reported a case upon which he had observed a Barker operation, performed by a very competent surgeon, with subsequent synovitis and complete ankylosis of the joint. He considered that the danger of opening the knee joint at present is exaggerated, though the fear of former times was well founded. He emphasized the importance of employing perfect asepsis, using rubber gloves on the hands and touching the parts only with instruments. He advised the use of as little suture material as possible. He used Kumol catgut in suturing the periosteum and chromic gut for the capsule and had found that it answered all the requirements. He advocated the semilunar incision in the skin, as it protects the joint and brings the scar above the patella. He further advocated the use of sterile strips of adhesive plaster (Z. O.) in place of the cutaneous sutures, stating that all necessary coaptation was brought about by buried sutures in the operation which he now followed. The joint can be exposed under local anesthesia using Braun's solution of adrenalin and eucain B. and there is no necessity of a general anesthetic, if massive infiltration of the part is practiced.

DR. J. F. OECHSNER spoke of the tendency at present to use as much absorbable material as possible in closed wounds and he thought that absorbable catgut is undoubtedly superior to silver wire or iron staples. He reported a case, which he had seen, where simple lateral incisions were made, the clot removed and one suture of absorbable material placed on either side in the capsule. He saw no advantage in irrigating the joint, as there is always danger of introducing pyogenic organisms, but he preferred to remove the clot with a sponge or curette. He preferred plaster of Paris dressing to the posterior gutter splint.

DR. PARHAM, replying to Dr. Oechsner, stated that isotonic salt solution produces far less trauma than the use of sponges or curette in a wound and that in his opinion it was better to leave the clot alone if one does not wish to irrigate, rather than attempt to brush it out with a sponge.

DR. PERKINS reported a case of fracture of the patella observed in his ward at the Charity Hospital which had been treated with adhesive strips. After four weeks, there being no union of the fragments, he operated upon the patella, performing the old method



of wiring the fragments. As the wire broke, he united the fragments with kangaroo tendon and chromicized gut, inserted through the drill holes. The capsule was sutured with chromicized gut, and the limb was put in semiflexed condition. Infection followed in the soft parts, but the joint was not involved. An excellent result was obtained.

DR. WALET reported a case of oblique fracture of the patella which he had wired about one year ago. The patella had been fractured by direct violence and when the patient came under the doctor's observation he had been treated several days with a compression bandage. Anti-pyretic and anti-phlogistic treatment was kept up until twelfth day, when he made a transverse incision, found a considerable traumatic arthritis, bloody extravasation and periosteum very friable. He therefore drilled the fragments and wired them, suturing the soft parts over the united fragments. He provided for drainage and there was some light periarticular suppuration two days after the operation, which quickly subsided. Five weeks following the operation patient complained of pain over the site of one of the two wires. This one was removed under local anesthesia. Anatomic and physiologic results were perfect.

DR. MARTIN approved of the open method, if done under the proper surroundings. He believed the transverse incision directly over the seat of fracture best. The skin could be turned back, exposing the entire patella without dissection, which was not the case with the horse-shoe incision, which required dissection of the flaps and an increased amount of trauma. It was also best if drainage had to be established. He preferred an iron wire suture run through the ligament at its insertion to the patella below, and through the tendons above, brought over the top of the patella and drawn sufficiently tight to hold the fragments in perfect apposition. This was best accomplished by first adjusting the broken surfaces and holding them in position with a double-toothed tenaculum. The operation was done in less time, did less damage to the already injured soft tissues, insured a better result, was less liable to cause infection by increasing leucocytosis and using absorbable sutures and did away with the danger of refracturing the fragments when beginning passive motion. The limb should be put up in a slightly flexed position, if a plaster cast was used. No cast, however, was really necessary, a Hodgin's splint answered every purpose. This



method prevented ankylosis by allowing free movement of the joint, and should adhesions form, they would be broken up by extending the limb without fear of separating the fragments, which was always a source of great danger, when absorbable sutures were used and the leg put up at hyper-extension. Dr. Martin exhibited skia-graphs of two cases treated by this method, one of five years' standing and one of three years. Both showed perfect results and had never experienced any trouble from the wires, which, being superficial, could always be removed if necessary. The second case which was treated in the flexed position returned to her household duties four weeks after operation and was never compelled to use any apparatus, not even a stick. Dr. Matas was correct about the introduction of too many sutures in the capsule.

DR. McGEHEE, SR., reported in this connection a case that demonstrated the uncertainty of bone union in these cases treated by the extention and fixation method without opening the joint.

Miss A. C., 19 years of age, of good family history and splendid physique, sustained a transverse fracture about the middle of the left patella on the 10th of December, 1904.

It was placed in the superextension splint of Dr. J. D. Bloom and the fragments placed in close juxta position and held there by adhesion plaster and plaster of Paris until the 17th of January, 1905—Union seemed to be good and she with partially ankylosed joint walked until the 20th of March she fell and refractured, or at least separated, again the pieces of the patella. On March 21 I opened the joint—found that adhesion of patella and capsule caused the broken pieces to remain in close apposition, but there was no ossification or bone union; callus thrown out, but in its place fibrous exudate, of considerable thickness, covered the fractured part. This, doubtless, is due to the fact that the patella is a sesamoid bone in which earthy deposit is not commenced until three years and not complete until puberty.

The exudate was cut away and the fractured ends brought together with strong kangaroo tendon. The capsule was snugly stitched up—limb put in plaster, which was removed in three weeks without any temperature or pain. Complete union seems to have taken place.

DR. DANNA, in closing the discussion, stated that he remembered one case which had resulted in death and several others, with

disastrous results, after opening the knee joint. It was with considerable timidity, therefore, that he undertook his first operation. In the last three cases he had inserted all sutures before tying them. He had seen two cases caused by direct violence in which the leg could be extended and he did not think these cases should be operated on. The whole front half of the joint capsule, as well as the patella, acts as a point of insertion for the quadriceps extensor and is just as important to the function of extension as the patella itself. Regarding drainage, he had employed it to be on the safe side, but he remembered one case operated upon by Dr. Batchelor in which there was no drainage, and with a perfect result. He did not consider drainage absolutely necessary, but it was certainly advisable. The futility of boring a hole in the patella is apparent when the same object can be attained by suturing the soft parts. He did not agree with Dr. Martin's idea of dressing the patient with the limb partially flexed. This operation is not contraindicated in old age or those unable to take a general anesthetic, as it can be done under local anesthesia if necessary.

---

MEETING OF APRIL 22, 1905.

DR. C. W. ALLEN read a paper entitled

**"Report of Two Cases of Ambulatory Typhoid, With Perforation."**

The question of intestinal perforation in typhoid, and its diagnosis, has long been one of interest and is much discussed in our journals at present.

The early diagnosis of perforation, at times easy, is frequently difficult, as a reference to the hospital records and literature will show. No symptomatology has been formulated or adopted that is uniformly reliable during the first few hours after this occurrence, at which time it is so important to make the diagnosis. This diagnosis, as a cause of acute abdominal disturbance, is relatively more difficult when it occurs in cases of ambulatory typhoid not previously known to be sick and consequently not under observation. My experience with this condition is illustrated by the report of the two following cases, the second of which I must thank Dr. Young, of Crowley, for permission to report:

During October, 1901, I was called to see J. G., white male, age 15 years.

Family history: The previous month a younger sister had a mild case of what was said to have been continued fever.

Personal history: For about one week previous patient had not been in his usual spirits; he had experienced some loss of appetite and lack of inclination to indulge in his usual sports; no fever or other symptoms had been noted. There was an absolute negative history of previous abdominal or digestive trouble.

Present history: Patient was asked to play ball the evening of the attack by some friends; was reluctant to accept, but did so after much urging. Following an effort to strike the ball with the bat he was seized with severe gripping abdominal pain, with nausea, weakness and a desire to go to stool. He went to a corner of the playground, made an effort at defecation, but was unsuccessful, the effort increasing the pain. He went home with the assistance of a friend and about two hours later I saw him. My attention was first struck by the expression and attitude, the Hippocratic facies, with dorsal decubitus, knees drawn up with hands over the abdomen. There was moderate abdominal distention, great pain, increased by pressure, most marked about umbilicus, with decided shock, somewhat quickened shallow thoracic respiration, rapid feeble pulse, restlessness, cold extremities. Temperature by mouth 100° F. He had vomited once.

Careful abdominal examination was made with a view of finding some positive evidence of the cause of the trouble. Palpation and percussion were used to try and determine some abdominal mass. Splenic and hepatic dullness were sought for and rectal examination made—but all were negative.

Abdominal auscultation showed some intestinal peristalsis, the various conditions giving rise to acute obstruction or peritonitis were each considered, volvulus, intussusception, ruptured appendix, incarcerated hernia and intestinal perforation. Incarcerated hernia and ruptured appendix being the most unlikely.

A probable diagnosis of intestinal obstruction was made and operation advised, but was indignantly refused, and an effort to move the bowels insisted on by the family.

Large doses of morphia were given for the pain, with medication by both mouth and rectum to move the bowels, but without effect, only increasing the vomiting and distress. The patient



was seen several times through the night. All symptoms were growing progressively worse, constant agonizing pains, tympanitis marked, vomiting constant, rectal temperature 103° F. Tremendous doses of morphia were needed to control pain.

In view of the aspect of the case during the night, a positive diagnosis of peritonitis was made.

Next day, towards noon, all symptoms remaining about the same, operation was requested by the family, but reluctantly undertaken, as it was clearly useless. After hurried preparations, I made a median abdominal incision under ether anesthesia. The intestines were much distended, the abdominal cavity contained a little gas and a small quantity of dark, reddish, foul smelling fecal fluid. The peritoneum, almost everywhere that we examined, was congested, the dilated vessels plainly seen, and it appeared unusually dry and in places seemed denuded of the epithelial layer. No pus or adhesion were encountered.

Towards the lower end of the ileum, opposite the mesentery, were several highly congested darkened areas, through one of which a small perforation was found; this was hurriedly closed with a few Lembert sutures. As the case was recognized as fulminating peritonitis and the patient doing badly, no further search was made, although only a small part of the intestine had been examined.

After evacuating a little fecal fluid and inserting a gauze drain, the abdominal cavity was closed.

The patient died two hours later, scarcely 24 hours after the onset of the trouble.

The case was clearly one of perforation following an unsuspected typhoid.

The second case was a patient of Dr. W. G. Young, of Crowley, and was nearly similar, in onset and symptoms, to the above.

On Tuesday afternoon in April, 1904, I was called in consultation to see E. F., white male, *æt.* 30, an alcoholic, plethoric muscular young man, weight 210 pounds.

I found the patient in the following condition: Hands and feet icy cold and clammy, face and body congested and cyanotic; marked dyspnea, dilated pupils, great abdominal distention, with constant pain most marked over the right side, increased by pressure; rapid, thready, almost imperceptible pulse; temperature by mouth 101° F.; by rectum 105.5° F. Constant vomiting and obstinate constipation.



History:—Patient had not been feeling his best for one week or ten days previous, but did not think that anything was the matter, and had kept at his work. There had been some loss of appetite, but no intestinal symptoms; the bowels had appeared normal.

The previous Sunday morning, while at stool, patient was taken with violent abdominal pain and collapse, needing assistance to return to the house. The symptoms continuing, Dr. Young was sent for. He concluded it was a case of acute intestinal obstruction of uncertain cause, and tried to relieve it by purgatives; large doses of oil by mouth and high rectal injections were used, producing one small stool. Other medicinal measures were used, with negative results.

Stimulation and morphia were given freely by needle. Temperature by mouth was never over  $101^{\circ}$  F. to  $102^{\circ}$  F., but by rectum was always between  $103$  and  $105^{\circ}$ .

The condition of collapse, abdominal distention and pain, were becoming progressively worse; vomiting commenced on the second day, and became more or less constant, very foul, but never decidedly fecal in odor.

I saw the patient the third day after the onset of the trouble. Dr. Young told me that he had early concluded that the trouble was intestinal rupture, probably following volvulus; that he had considered operation, and discussed it with the family, but abandoned the idea, as the patient's condition would not stand it.

The patient died suddenly, following a muscular effort, while we were in the house.

We secured a post-mortem and found the following conditions:

The abdominal distention, which was marked, was due to an enormous accumulation of a purulent and fecal fluid, with some globules of castor oil. The intestines were not more distended than normal, but were matted together and to the abdominal wall by adhesions containing many pockets of pus, and extending over the whole of the right side, from the iliac to the epigastric region. About 18 inches from the ileo-caecal valve, two small perforations were encountered about one foot apart.

The area around the perforation was thinned, darkened and congested. This portion of the bowels was resected and opened. In each case the perforation corresponded to an ulcer, which was typically typhoid in character, being opposite the mesenteric attach-

ment, irregularly oblong in shape, their long axes corresponding to that of the bowel, with thin, undermined edges.

We next resected, opened and examined quite an extent of bowel without finding any other lesions. The Peyer's patches, where we could recognize them, showed no macroscopical lesions.

The perforation in each case occurred during a muscular effort; the onset and early symptoms not being unlike acute intestinal obstruction, particularly so when considered with the fact that the patients had been only slightly indisposed, and were thought not to have had typhoid fever.

The early treatment instituted in each case, owing to the real causes of the trouble not being realized, tending to aggravate rather than relieve the condition in one case, some of the cathartic being found free in the abdominal cavity; the true condition not being recognized until the trouble had persisted for some hours, when the continued rise of temperature and increasing abdominal symptoms made the condition unmistakable.

That a leucocytic count or test for Widal may have helped to arrive at a diagnosis a few hours sooner, is possible.

The only hope in these cases would have been immediate operation, and they emphasize the necessity for early operation in all cases of intestinal obstruction, with acute symptoms and evidence of shock. In some very few cases, the operation may prove to have been unnecessary, it is then only an exploratory laparotomy; but I believe that the findings in the majority of cases will prove that the attendant's judgment has been good, and will save many lives.

NOTE—The above cases impress me with the fact that mild unrecognized attacks of typhoid do not negative the existence of severe intestinal lesions.

It is also to be noted that all ulcers that we found had perforated; the examination for ulcers in one case was thorough for the small intestine, but did not include the colon. The examination in the other case was less thorough, as it was made during life.

#### DISCUSSION.

DR. BASS, in opening the discussion, stated that the two cases just reported by Dr. Allen emphasized the difficulty of diagnosing these cases before operation. Every case of typhoid fever showing symptoms of either perforation or intestinal obstruction, in his

opinion, should be operated upon at once. Ambulatory typhoid, with perforation, he considered a very rare condition. In running over some of the literature, he found only one ambulatory case in 48 cases of perforation. He presented the following table, arranged from cases reported by close observers and reliable reporters, which shows the occurrence of the different symptoms:

### TYPHOID.

	MANGES	MCCRAE AND MITCHELL	SHATTUCK, WARREN AND COBB
Perforation .....	19	8	21
Onset sudden .....	15	7	7
Onset gradual .....	4	1	14
Abdominal pain .....	17	7	21
No abdominal pain ....	2		
Rigidity .....	18	8	1
Distention .....	14	4	
No distention .....	3	4	
Flank dull .....	8	5	
No flank dull .....	8	3	
Liver dull obl. ....	11	4	2
Liver dull not oblique..	8	4	
Leucocytes rose .....	7	5	4
Leucocytes fell .....		3	
Leucocytes stationary ..	6	3	
Leucocytes above 8,000.	15	5	
Temperature rose .....	9	7	3
Temperature fell .....	3		A few
Temperature no change	4	1	6
Pulse rose .....	12	6	
Pulse no change .....	4	2	
Respiration rose .....	10	5	
Respiration no change.	6	3	
Vomiting early .....	4	0	3
Vomiting late only ...	5	1	3
Collapse .....	1	2	2
Sweating .....	2	3	
Chill .....	8		
Hiccough .....		3	
Operation .....	16	7	21
No Operation .....	3	1	
Death .....	13	6	17
Recovery. ....	6	2	4

He considered the differences in observation regarding liver dullness, observed by the different writers, was due to the personal equation, each man percussing out dullness to a different degree.

Pain being the most frequent and constant symptom, he had arranged another table from the literature with special reference to that symptom which follows:

### PAIN IN TYPHOID.

	MCCRAE	SHATTUCK, WARREN AND COBB	
No pain .....	500	70	160
Tenderness only .....	206	62	138
Pain .....	72		
Onset only .....	222	8	22
During course .....	61		
Hemorrhage .....	161	8	22
Hemorrhage and pain..	36	8	
Perforation .....	14	1	
Perforation and pain..	13	3(?)	
	13	3(?)	

DR. F. H. WATSON considered that the pain alluded to by Shattuck, Warren and Cobb was evidently the prodromal pain of typhoid and not the characteristic pain of intestinal perforation, which is sudden, of a crampy character, associated with the desire to go to stool. Shortly after the onset of this pain, within an hour or so, the facies change, assuming an anxious and drawn expression. He considered the rigidity of the abdominal muscle of great diagnostic importance in intestinal perforation. There is always a slight rise in the leucocyte count after perforation, together with an increase of blood pressure of 15 millimeters by the Rivau-Rocki instrument. If obliteration of liver dullness is waited for before performing laparotomy, it is self-evident that operation will be performed after peritonitis has set in, thereby lowering the chances of recovery.

DR. ELLIOTT, JR., had seen but one case of perforation in typhoid fever, which occurred on the tenth day of convalescence. The patient had endeavored to test his strength by pulling against the bedstead. He was seized with sudden pain in the abdomen,



pulse became imperceptible, followed shortly by vomiting, and death without recovering from the initial shock. Post-mortem examination revealed perforation of the ileum at the site of a Peyer's patch.

DR. TRAHAN considered that the differential diagnosis between intestinal perforation and obstruction was often difficult, but by bearing in mind that in obstruction there is rarely any subsequent elevation of temperature, together with the early appearance of fecal vomitus, the difficulty will be somewhat overcome.

DR. NELKEN reported two cases of typhoid fever of the ambulatory type, which had been sent to his ward at the Charity Hospital suspected of having yellow fever. Widal's reaction was negative and they presented few clinical manifestations of typhoid fever. They were both seized suddenly with violent abdominal pains, sudden drop in temperature and symptoms of shock, with subsequent death from intestinal perforation.

DR. LEBEUF reported a case of pinhole perforation in a severe case of typhoid fever which had recovered after laparotomy and enterorrhaphy. The patient developed an abscess in the right iliac region, which was incised and from which pure cultures of the typhoid bacillus were found.

DR. EUSTIS reported a case of ambulatory typhoid, with perforation, with the following history: A colored woman, 23 years of age, had been feeling perfectly well and was washing clothes when she was seized with pain in the abdomen and immediate vomiting. She was brought to the hospital the following day, with temperature at 102°, pulse 180 and incessant vomiting of bile-stained fluid. The patient weighed about 300 pounds and on account of the great amount of subcutaneous fat, satisfactory examination of the abdomen could not be made. The abdomen was tender on pressure, only moderately distended and the abdominal walls were apparently not very rigid. Leucocyte count was made and revealed only 12,000 leucocytes. There were repeated hemorrhages from the bowels, but no clots were expelled. Two days after admission she died, and post-mortem examination revealed perforation of the lower end of the ileum, with ulcerated Peyer's patches and solitary follicles, with general peritonitis. Widal's reaction in this case was negative. The case was of interest on account of the suddenness of onset, with no prodromal symptoms whatever.

DR. ALLEN, in closing the discussion, did not consider the leucocyte count reliable in diagnosing intestinal perforations. Some cases of peritonitis in typhoid have occurred without any perforation. Regarding Dr. Watson's criticism he had always thought that the slight pain manifests itself when the perforation takes place and that the violent abdominal pains were caused by subsequent peritonitis. Both of his cases had come under his observation in the country and he had had no means of testing the Widal reaction. He did not consider that Dr. Trahan's point regarding the absence of temperature in intestinal obstruction was reliable. Both of his cases had a temperature of 100 to 101°, coming on about four hours after the perforation, while a case of intestinal obstruction which he had seen had a temperature of 101°, which quickly subsided after purgation.

DR. M. A. SHLENKER read a paper entitled

**“Etiologic Considerations of Retrodisplaced Uteri and Their Associated Symptoms.”**

While I have nothing new or original to offer you in this dissertation, I have concluded from the frequent operations and numerous procedures designed for the correction of Retrodisplacement, to impress upon you the unimportance of this condition when unassociated with complications, and to warn you against early operations for the correction of this state as a panacea for all ailments, and to present you with statistics verifying my remarks.

The normal position of the uterus, with which all are familiar, is, a state of slight ante flexion, and lies between the planes of the inlet and outlet of the pelvis, with its long axis perpendicular to the long axis of the vagina. It is held in position by the abdominal pressure exerting itself from above and by the perineum acting from below. The broad, round, uterosacral, uterovesical ligaments act as guys and not as supports, and serve to steady and prevent too great lateral fore and aft movements, and only when a pathologic condition exists, whereby the uterus falls too low, or turns fore or aft—do these ligaments exert themselves. This position, of course, is modified by the condition of the rectum and bladder when distended. “The cervix enters into the upper end of the vagina, at an angle with the latter, and the fixation of the vagina by the

levator ani and the surrounding connective tissue, and the support furnished by the parametria, makes the situation of the cervix a relatively fixed point." (Bandler.)

Retrodisplaced uteri may be classified as congenital or acquired.

As to the congenital type, we will dismiss this form by quoting Bandler's and Garrigues' views, which are concurred in by others, and are by far the most acceptable; the conclusion at which the former arrives, is that this type is invariably due to embryonic errors, while Garrigues states: "Malpositions of the uterus retro, ante and lateral, when not due to other causes, are developmental abnormalities."

As to the acquired form: I think by far the most frequent factor in the production of this condition is due to too early arising after parturition. The organ is large and heavy and is in an imperfect state of involution, as the surrounding supports. The increased weight, together with intra-abdominal pressure exerted from above, predisposes to a retrodisplacement. Lacerations of the perineum, resulting from delivery or otherwise, is next in my mind. The relaxed condition of the outlet permits the vaginal walls to draw on the posterior wall of the uterus, thereby pulling it down and back—inflammatory involvements from the adjacent peritoneum and pelvic organs, whereby adhesions to the posterior wall of the uterus are formed, and the organ is drawn in a backward position, sometimes binding it to the hollow of the sacrum, and it is not infrequent that we find a diseased appendix the source of this trouble.

The gonorrheal infection is one of the most frequent causes, and Steffeck of Berlin, in his study of 6,000 cases, finds gonorrhea to a large degree responsible for this condition.

Traumatism, sudden falls, lifting heavy weights, prolonged coughing, all of which increase intra-abdominal pressure, exerting itself on the anterior surface of the uterus, predispose to a retrodisplacement.

Lacerations of, and hypertrophic conditions of the cervix, emaciated conditions of the patient, whereby there is a loss of the cellular tissue around the uterus, as in old age, and wasting diseases; relaxation of the abdominal parietes; tumors located on the posterior surface of the uterus—are also to be considered as factors in the production of this condition.

As to the symptomatology attributed to this condition, I will state that retrodisplaced mobile uteri are without symptoms, but I shall enumerate those most frequently given, namely backache, bearing down pains in the pelvis, dysmenorrhea, frontal and occipita headaches, pains in the inguinal region radiating down the thigh, distressing nervous symptoms, such as wakefulness, general weakness and inability to stand any length of time or walk any distance, vesical irritability due to traction on the bladder, fullness in the rectum from pressure on the fundus, which also interferes with the venous circulation, producing hemorrhoids, endometritis, associated with leucorrhœal discharge, menorrhagia, as a result of a congestion of the organ. Sterility is often attributed to this condition.

Freund and Hilderbrandt conclude, after a study of retrodisplaced uteri, that they predispose to kinks in the ureters, and a subsequent hydronephrosis. Williams, in his recent text-book on obstetrics, says: "Retrodisplacements, more particular retroflexion and prolapse, are considered a most important factor in the causation of abortions."

In this country Dunning, of Indianapolis, has studied 112 cases of retroversions with symptoms and tabulates the associated complication: Prolapse of one or both ovaries, 48 cases; endometritis, 32 cases; lacerated cervix, 27 cases; prolapse uteri, 17 cases; lacerated perineum, 8 cases; movable kidney, 8 cases.

Bandler, in a recent paper on retroversioflexio, quotes the figures of Schroder of Königsberg, who made an exhaustive study of this subject, and his statistics to me are of intense interest "To determine the frequency of retroversioflexio in healthy women and in women not suffering from pelvic symptoms, he examined 184 women six weeks postpartum, 82 other patients complaining of no pelvic symptoms, and 145 general cases in the internal medical clinic in Königsberg. His examinations of 411 patients included *virgines intactæ*, *nulliparæ*, and *multiparæ*. In 25 *virgines intactæ* without pelvic symptoms, he found a retroversioflexio ten times. In 49 *nulliparæ* without pelvic symptoms, he found 14 cases of retroversioflexio. Three *virgines intactæ* with pelvic symptoms furnished 1 case of retroversioflexio, while 5 times retroversioflexio was found in 13 *nulliparæ* suffering with some pelvic symptom, giving for 90 *nulliparæ* 30 cases, *i. e.*, 33 per cent. of retroversioflexio.



One hundred and ninety-one multiparæ without pelvic symptoms furnished 42 cases of retroversioflexio, while 29 retrodeviations were found in 85 patients acknowledging some pelvic symptoms, making a total of 71 cases of retroversioflexio in 276 multiparæ, *i. e.*, 25 per cent.

At the menopause 13 retroversioflexio were found in 38 patients without pelvic symptoms, while 4 cases were found in 7 women with pelvic symptoms, giving 17 retrodeviations in 45 patients, *i. e.*, 37 per cent.

In these 411 women were found 18 per cent. of retroversions and 10 per cent. of retroflexions, giving a total of 28 per cent. In 303 patients without pelvic symptoms were 79 retrodeviations, 26 per cent. In 100 cases with symptoms were 39 retrodeviations, 36 per cent. It is to be mentioned that the symptoms were brought out only on special questioning.

It seems, therefore, that 25 per cent. of healthy women have retrodeviations of the uterus, of which two-thirds have retroversions, and one-third retroflexions. Of the 79 cases of retrodeviation without symptoms, 8 suffered from hysteria, 3 from neurasthenia, 4 from indefinite stomach symptoms, 3 from headache, and others from backache, dizziness, ischias, lumbago, etc. Of these 79 cases only 16 evidenced a more or less profuse menstruation, so that menorrhagia is no result of retroflexion.

Of 39 cases of retrodeviations with symptoms, 6 nulliparæ complained of some pain in the pelvis and back, with some disturbance (pain) during menstruation, 5 had shortened or painful folds of Douglas, 11 shortened, infiltrated, and painful parametria; 3 descended ovaries, and 5 descent of the anterior vaginal wall, giving 24 cases suffering from pain in the pelvis or back in whom causes other than the retrodeviation could be found.

In 102 patients of Wormwer's clinic of Basle, in whom an uncomplicated movable retroflexion was found, there were 36 with no symptoms whatever, 32 complained of pains in the loins alone and with other symptoms, and the other presented themselves on account of dysmenorrhea or menorrhagia. He further states that the symptoms in many cases were independent of the position of the uterus, as proven, since a number of cases were entirely relieved by general treatment, while, on the other hand, of some 20 cases who were treated anatomically by Alexander's operation, only

5 remain free from their old complaint after a period of some months, although in no case was there a recurrence of the retroflexion, or were the pelvic organs diseased.

From the above figures will be noted that his views are in perfect accord with others quoted heretofore, and in the investigations of these conditions before resorting to surgical treatment, it is well to search for the source of trouble, and treat the complication, as it is well known that these conditions exist before puberty and after the menopause produced no symptoms whatever.

To conclude I will reiterate Wormwer's conclusion, who advises "that treatment should be instituted with an eye, first of all, to correction of the complication or neuroses; when this completely fails, it is then time enough to attempt correction of the malposition by operative measures."

#### DISCUSSION.

DR. MILLER, in opening the discussion, stated that fully 25 per cent of his cases of uncomplicated retroversion showed no symptoms. From the reports of Holden on the results of ventral suspension for retroversion, only six per cent. showed a clinical cure. He had been watching the reports from the German clinics of late, in which it is stated that in this condition there are fibrous changes of the uterus, which he considered of importance. We often find retroversion in old women without any symptoms and many cases of retroversion which are operated upon with subsequent correction of the displacement, which are not relieved by the operation. He advised the use of the pessary in many cases and in those cases in which the symptoms are relieved by its use an operation should not be performed. Retroversion, which is so common after the puerperal state, can often be relieved by rest in bed.

DR. PERRILLIAT stated that retroversion of the uterus is often found with no symptoms whatever, but he considered that these cases should be watched most carefully, for, if infection of the Fallopian tubes takes place, with subsequent peritoneal inflammation, the uterus becomes anchored in this malposition. There was another reason for correcting a retroversion, namely, the obstruction of the uterine circulation from twisting of the broad ligaments. The obstruction to the uterine circulation causes a passive congestion of the endometrium, with resultant disorders of menstrua-

tion. Therefore, we cannot say that retroversion of the uterus is an innocent condition, for we cannot tell when infection may occur with the subsequent disorders of menstruation. Palliative treatment in these conditions is certainly preferable to operation, but it is rare that a patient will wear a pessary more than a year.

DR. SHLENKER, in closing the discussion, stated that after a patient has been found with a retroversion of the uterus with symptoms referable thereto she should be kept under observation and infection guarded against by prophylactic measures.

---

#### REPORT OF CASES AND MEDICAL NEWS.

DR. LEBEUF reported a case of *apparent super-fetation*, with the following history: On last July 4th the patient had had a miscarriage and had been delivered by a midwife. Last March 18 the doctor had delivered the woman of a 12-pound healthy child, and had expressed a normal placenta immediately after delivery. On the third day after labor the patient was seized with uterine pains, which were apparently severe after-pains, but shortly after the occurrence of the pain the patient expressed another normal placenta.

---

## Miscellany.

---

### Toast to the Medical Press.\*

By MR. M. PICARD, New Orleans, La.

*Gentlemen of the Louisiana State Medical Society:*

Inasmuch as the subject allotted to me is strictly technical I have thought it proper to conform to the etiquette of your Society and present the result of my investigations in writing. Before doing so, however, it is but just to explain that I was only notified at noon to-day that I would be called upon to respond to a toast; that I have had no time for preparation except the time that has elapsed between the hour of your adjournment and the present moment, and that what I have to say may, under the circumstances, be rated as ill-considered and crude by a society fresh from the

---

\*In response to a toast to the "Medical Press," at the Banquet of the Louisiana State Medical Society, May 11, 1905.

hearing of papers of scientific value and literary merit. I trust this circumstance will not be forgotten if my paper fails to present that complete mastery of facts and felicity of statement to which you are accustomed.

I must confess that I learned with some dismay that I would be expected to reply to so distinguished a medical authority and so accomplished an orator as Dr. Dyer, and my temerity in accepting the toast may subject me to the taunt that fools rush in where angels fear to tread. I thought at first that your Chairman had not treated me fairly, but on reflection I was bound to admit the wisdom and propriety of Dr. Dyer's selection, for, if the daily press must be skinned, it is eminently fit and proper that the operation be entrusted to one of the most illustrious skin specialists of this or any other age.

Before entering upon the subject assigned me I wish to thank this Society for a piece of information that I was long seeking; groping in the dark until the white light of your deliberations revealed the truth in all its startling phases. For years I have been suffering with a complaint that I was unable to classify. Its symptoms consisted in a disinclination for severe study and a tendency to go to sleep while endeavoring to concentrate the attention upon a subject of scientific value but not otherwise attractive. I did not know what ailed me and you may judge of my horror and surprise when I learned from one of your papers that I had uncinariasis. As the reading of the paper progressed, the symptoms which had, theretofore, been latent became more and more acute and by the time the paper was concluded I was nearly in a comatose condition. I am happy to say that my recovery was equally sudden and that the active symptoms disappeared with the removal of the cause, and I can promise you, gentlemen, that I will sincerely endeavor during the perusal of this paper, to protect you from uncinariasis.

In describing the medical journal it must be understood that I am speaking of them generically, and am free to admit that they do not all present the same diagnosis. I am only speaking of a dozen cases or so that I examined in the hasty preparation of this paper. There are probably some that are free from the symptoms that I noted, but these prove nothing.

The average medical journal may be defined as a publication



that has no publicity—with a circulation that does not circulate and a subscription list largely of the dead-head persuasion. Its income bears no reasonable ratio to its outlay and its bank account is a thing dreamed of but never realized. It has nominal editors, but their duties are largely perfunctory. In nine cases out of ten, the medical journal edits itself. The editors usually surround themselves with a staff of eminent collaborators who furnish the required copy. The rest is a mere process of natural selection and the survival of the fittest. Instead of being edited with a pencil it appears to be edited with a shovel. Their contents are so invariably alike in quantitative arrangement that they seem to follow an established rule. The prescription usually reads like this: Eighty pages of contributed matter, 3 pages of book reviews and 4 pages of editorial. When there are two editors the question frequently arises which one does the heavy work. My conclusion is they divide it. One month Charles carries the mail to the post-office; the next month Isadore takes it.

The normal condition of the medical journal is quiescent, with paroxysms of activity, recurring regularly 12 times a year, but they occasion no uneasiness or alarm and subside without treatment.

Medical journals are sometimes read, usually by their contributors and students of literary curiosities. There is no authenticated case of a man in active practice consulting a medical journal except when engaged in some abstruse investigation. As a specific for insomnia they have no equal in the medical world.

The style of the contributors is in inverse ratio to the merit of the subject matter. It is always prolix and too often pedantic. I will give only two illustrations, selected from journals published in large Eastern cities.

“Report of a case of Chronic Pyelitis due to *Bacillus Coli Communis* Infection, Stimulating Renal Tuberculosis.”

“A Study of Acute Encephalitis.”

The author of this last named paper was a thoughtful and considerate man and apprehending that everybody might not know what acute encephalitis means he adds this clear and lucid explanation in parenthesis (*Staphylococcus Pyogenes Aureus*). Of course, any child could understand after that.

I have often wondered why the medical editors do not avail

themselves of their undoubted opportunities for humor and give prizes for papers of real interest. If I had charge of one I would give a prize of \$10 for the best answer to the following questions:

What does a Christian Scientist do when confronted with a case of ovarian cyst with twisted pedicle; or a fracture of the lower extremity of the radius; and what does the osteopathist do when confronted with a ruptured aneurism or a simple urethritis complicated with lithemia and urethromania? How deep and how wide must the osteopath's stock of misinformation be before allowed a diploma? Why don't the faculty of female colleges cut physiology, psychology, geology, and all the other ologies, and teach the rudiments of gynecology?

What the medical journal needs to increase its utility is copious doses of the essence of ginger, to be applied after each monthly paroxysm, with an occasional salient injection of horse serum.

Before concluding I wish to say something that ought to be said in justice to this Society. Within the last three months I have reported as many as six conventions, and I can frankly say that in none of them have I encountered so high an average of natural ability, acquired skill and single hearted devotion to duty as I saw before me at your meetings, and there was this difference between your conventions and all others that I have attended. In other conventions entertaining was the feature and business an incident; in your convention business was the feature and entertaining the incident. If ever men deserved a banquet by three days of continuous performance it was this Society, and I am glad to be with you and see you enjoy it. My feelings to-night can be best described by a vaudeville specialty I once saw. Two ragged hobos cross the stage and one of them finds a pocket-book containing \$400. "Bill," said the other hobo, "what are you going to do with all that money?" "Do with it," said Bill, "I'm going to buy a meal ticket for life." If I had my way I'd buy a life membership in your Society and ask it to remain in perpetual session.

# N. O. Medical and Surgical Journal

---

## Editorial Department.

---

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

---

---

### Sane Ethics Applied to Legislation.

Any regulation, which even remotely has the blush of a reflection upon personal liberty, at once creates an antagonistic sense in the average lay mind. Most individuals would resent an imposition which was brought to them with a label upon it, but color it with a toothsome phrase of deception, insinuate it by a broad bit of personal flattery and the victim swallows it, even though he may know that he is being gulled.

The acknowledged advances in the science of medicine have brought some education to the masses, but this in the more intelligent has simply created a false sense of information which has led some of them to feel that their dip in the Pierian Spring was more than a swallow, while it has really failed to bring soberness. Our outcry against the parasites upon the medical profession has done very little good; the public always is looking for some sort of diversion, and whether it be the self-elected saint of Boston, or the bone-setting factory crowd of Missouri, the desire for diversion, even in religion and health matters, finds occupation for these. Now and then, the public is unwillingly protected. Some bold marauder in his neighbor's preserves gets his corporosity full of bird shot for the excursion; likewise, the charlatan who presumes too far runs against some objection to his wiles and ways and he suffers.

Boston has enjoyed a popular, even if jocularly bestowed, appellation of the "Hub," applied to some peculiar predistinction as a center of higher intellectuality; her walls are sanctuaries of various and sundry cults, and from her confines have emanated about two-thirds of the hurley-burley of fake religions and health and other associations which have flooded the country. Antithetically, Boston should enjoy a great distinction for her sundry brew, but ethically,

she must resign the sphere of moral privileges to another center, for in spite of the liberties of charlatanism which the "Hub" has permitted and encouraged, the rest of these United States is not yet ready, in toto, to fall in line.

Pennsylvania has twice, in recent years, gone on record with a sane interpretation of the relation of the courts to impositions in medical practice seeking fields of labor in the disguise of honest virtue. In Philadelphia a corporate right was refused the Christian Science crowd, because the courts held that it was not compatible that a church of God should organize under the laws of the state with the skeletal feature of its purpose indicated as the sale of books; books which were the principal source of revenue to the followers of the Boston saint, and which were essential as a part of the initiation exercises. The *Ladies' Home Journal*, also emanating from the Quaker City, promulgated the decision to accept no more patent medicine advertising in its pages, setting thereby a standard for all ethic journals in the country, a standard which only a few have been decent enough to follow.

And now Governor Pennypacker, of Pennsylvania, in spite of the fact that both houses of the State Legislature had passed a bill, vetoes the bill providing for an examining board for osteopaths and giving them legal standing. All honor is due Governor Pennypacker, but all credit is due the earnest work of the Philadelphia County Medical Society making such a fact possible. It is with a distinct degree of satisfaction that we submit to our readers the text of the veto, sent us, with request to publish, by the Secretary of the Philadelphia County Medical Society.

It is not so much upon the quietus set upon the osteopath that we wish to comment as upon the ethic conclusion of the Governor of a great state from the evidence and argument submitted by a clean body of men. The evidence of the public spirit of the constituted medical profession is shown every day by the hospital affiliations and work and by the average of compensation the "regular" medical man receives. Some modicum of return is deserved at the hands of the public, even if that has to be demanded and fought for in the courts. Many states are discussing the very question which Pennsylvania has settled; many states have gotten only to the point of permitting licenses for these charlatans in Jacob's coats. Louisiana herself is on the way to take some action,



favorable or otherwise, and only recently at the State Society meeting strenuous discussion arose as to what effort should be made and how the best results could be accomplished. The Philadelphia men worked along lines of education and conviction and they succeeded. Perhaps we might begin now along the same lines.

### **Worthy Honors.**

The Picayune Loving Cup, annually distributed to the most deserving public-spirited citizen of New Orleans, was this year awarded to Dr. A. W. DeRoaldes, the founder and surgeon-in-chief of the Eye, Ear, Nose and Throat Hospital of this city.

He has deserved a loving cup every year since that institution began, for no man in the City of New Orleans has expressed a higher self-sacrifice than Dr. DeRoaldes in his devotion to this institution. Starting in small lines, it has risen to be a potent factor in the charity not only of New Orleans, but of the whole State of Louisiana and of the South. There is no institution in this city, state or country where charity is more broadly and liberally dispensed, and with better results. All of this is due directly to the earnest effort of its founder and devoted sponsor.

During the month of May, at a meeting set apart for that purpose, the Orleans Parish Medical Society dedicated and hung a portrait likeness of Stanford E. Chaillé, Dean and teacher of the Medical Department of Tulane University. His connection with Tulane for over fifty years in its various departments, especially as Professor of Physiology, and as head of this department for the past twenty-five years, has earned the respect and affection of hundreds of medical men in the South. His personal work in sanitary science and in the fields of medicine have entitled him to even greater honor than was expressed in the dedication ceremony of the Orleans Parish Medical Society.

Both of these Nestors of Medicine have marked history in the medical annals of Louisiana, and the JOURNAL is proud to notice their achievements and to participate in the glory of their distinction.

### **Meeting of the Louisiana State Medical Society.**

There is no question but that the 26th annual meeting of the State Medical Society, which was held in New Orleans May 9, 10

and 11, was, all told, the most successful which has ever been held by the State Society.

The attendance was the largest on record—321. The number of papers was ample, their quality above the average; the discussions were interesting; the social functions were all enjoyable and enjoyed.

The meeting was called to order by the President, Dr. Charles Chassaingnac, shortly after 9:30 A. M., in the large lecture room of the Medical Department of Tulane University. An invocation by Rev. Dr. John C. Barr opened the session, and Dr. L. G. LeBeuf, President of the Orleans Parish Medical Society, delivered an address of welcome. The Committee of Arrangements produced the program for the session as its report. The reading of the minutes of the 1904 meeting was dispensed with, as they had been published in the JOURNAL shortly after the session of last year. All the officers, with the exception of the vice president, presented their reports, thus making an unusual record for promptness and preparation. It was shown that here had been no reaction from the boom of last year; that both the nominal membership and the actual paid-up membership had increased to a healthful extent, and that seven additional component parish societies had been organized during the year, thus leaving very few yet to be organized, and some of those too sparsely settled for organization at present. The finances of the Society were also shown to be in good condition. The records of all standing and special committees were presented without exception. They were considered under the head of "New Business," and under a suspension of rules numerous amendments to the by-laws were adopted, the most important relating to the change in the formation of the Nominating Committee, which is now to be composed of 14 members, or two from each councillor district, who will be elected by the representation present from each district, instead of by the councillors, as formerly. These amendments were made operative from the moment of their passage.

After adjournment the members of the Society were entertained at a buffet luncheon by the Faculty of the New Orleans Polyclinic.

At the afternoon session the reading of original papers was taken up, beginning with the Section on General Medicine on the subject of "*Pneumonia*," by Dr. L. G. LeBeuf, Chairman of the Section. This and the majority of the papers were freely discussed and many

valuable points were brought out. The reading of papers was continued up to the hour of adjournment, after 5:30 p. m. These papers will be published, together with discussions, hence it will be useless to particularize.

At the evening session Dr. R. Matas, assisted by Dr. A. L. Metz, gave a demonstration of the Carman Opaque Projector, showing how beautifully objects and illustrations can be shown with great clearness and in their original colors on a screen, making it very valuable for class work. Even the ticking of a watch was clearly shown on the screen.

Following this demonstration the reading of papers was resumed and continued until 11:30 p. m.

On the second day, after the reading of an abstract of the minutes of the preceding day, the reading of papers was resumed up to the regular time of adjournment at 1:00 p. m.

At this hour the members enjoyed the hospitality of the members of the Medical Department of Tulane at a buffet lunch.

After this the reading of original papers was resumed and continued uninterruptedly until the time of adjournment, at about 6:00 p. m.

At 8:00 p. m. was the session to which the public is invited, and the Auditorium, which holds about 500 persons, was comfortably filled. The President of the Society read his annual address, which was on "*The Role of the Mosquito in the Propagation of Disease, Especially Malaria.*"

Dr. E. B. Craighead was the annual orator and delivered a brilliant address, tending to prove that the truly great part of man is his spiritual and intellectual nature.

The session was concluded by an interesting demonstration in color photography by Dr. A. L. Metz.

During the intermissions Prof. O'Connell's orchestra played pretty and appropriate selections.

On the morning of the third day, after the reading of the previous day's minutes, the report of the Nominating Committee was in order, and the officers named were as follows: For President, C. J. Ducoté, of Avoyelles; First Vice President, J. F. Oechsner, of New Orleans; Second Vice President, D. R. Sartor, of Richland. Counsellors—Second Congressional District, E. J. Graner, Orleans; Third Congressional District, H. L. Ducrocq, Lafourche; Fourth

Congressional District, N. K. Vance, Caddo; Fifth Congressional District, R. F. Harrell, Lincoln; Sixth Congressional District, C. M. Sitman, St. Helena; Seventh Congressional District, C. A. Gradinier, St. Landry. Delegates to the American Medical Association meeting in Portland next July were Drs. J. M. Barrier and Charles Chassaignac. Alternates: Drs. F. A. Larue, of Orleans, and E. Lee Henry, of Rapides.

A pretty compliment was paid the President when his election as delegate was made by rising vote.

New Orleans was selected as the place of meeting in 1906; beginning the second Tuesday in May.

The name of Dr. E. L. McGehee and M. J. Magruder were selected for presentation to the Governor for his selection for appointment on the State Board of Medical Examiners.

At 11:00 a. m. was taken up the special order of the day, a discussion of legislative matters, including the report of the State Board of Medical Examiners. The reasons for the failure by one vote in the passage of the law amending the Medical Practice Act came out, as well as the difficulties encountered and the sources of opposition. It evidently was the sense of the meeting that every effort be made to have a suitable law enacted at the next session of the Legislature, and the sum of three hundred (\$300.00) dollars was voted for the purpose of engaging in a campaign of education on the subject.

The reading of papers in the various sections was again taken up until the hour of adjournment was reached, which was the signal for a little trip in special cars, awaiting in front of the meeting place to take the members to the New Orleans College of Dentistry, where they were served with a buffet luncheon as a compliment from the Faculty of the Dental College.

At the afternoon and last session one original paper was read, completing this part of the program. All unfinished business was disposed of and various resolutions were adopted. Among the most important were the following:

*"Whereas*, The steadily increasing demands upon the space and the resources of the Eye, Ear, Nose and Throat Hospital of New Orleans have now reached a point where it is no longer possible to conduct the work in the old dwelling house, which up to now has been its home; and as the Board of Trustees, perceiving this, has



finally determined to ask of the ever charitably inclined people of New Orleans and of Louisiana the sum of \$150,000 to erect a new and modern hospital, which will not only increase the charitable and the scientific possibilities of the institution, but will be an ornament and credit to the Commonwealth as well; and as the physicians of Louisiana best know the benefits the institution has conferred upon the poor of all parishes, its scientific value, and what it has accomplished in teaching and equipping a host of practitioners, who are now competent to relieve, and are, by their labors, relieving this class of diseases in the towns of this and our neighboring states, and who look upon the Eye, Ear, Nose and Throat Hospital of New Orleans as their second Alma Mater; be it

*“Resolved,* That the State Medical Society commends to the generosity of the people and the profession of Louisiana the Eye, Ear, Nose and Throat Hospital of New Orleans; that it urges upon the physicians of the different parishes the duty and privilege of assisting to raise from the police juries and people of their respective parishes a part of the sum necessary to erect a new and suitable hospital building so as to permit the proper carrying on of the ever-growing charitable teaching and scientific work of this institution.”

On motion of Dr. Kohnke it was resolved that the proper officers be instructed to recommend and urge such state legislation as will encourage vaccination against smallpox.

On motion of Dr. Mayer legislation was recommended looking to the eradication of the mosquito.

On motion of Dr. Oechsner a resolution was adopted deprecating the practice of doctors and pharmacists in furnishing serum whose efficacy had not been demonstrated.

Resolutions eulogistic of the late Dr. John Calvin Allen of Baton Rouge were presented by Dr. McVea and unanimously adopted.

Resolutions were also passed thanking the Orleans Parish Medical Society, the Tulane Medical Faculty, the New Orleans Polyclinic, New Orleans College of Dentistry for generous hospitality and appreciated courtesies.

Special resolutions were also passed thanking Dr. Chassaignac and other retiring officers for faithful service, and to the press for accurate reports of the meetings.

Dr. E. B. Craighead and Dr. J. J. Castellanos were elected honorary members by unanimous vote.

The crowning social event of the session was the banquet tendered by the members of the Orleans Parish Medical Society to the visiting members. It was given at Grunewald Hotel and was attended by about 160. The Committee of Arrangements had spared no pains to make it a success and they were rewarded by the manner in which those present enjoyed themselves and their appreciation of the good things to eat and drink, and the witty things that were said.

The following toasts were preceded by felicitous introductions at the hands of Dr. Oechsner, toastmaster :

"The Policy of the State Medical Society in 1905-06, and What I would Do Were I President," Dr. Charles Chassaingnac, retiring president.

"What I Would Have Done Had I Been President in 1904-05," Dr. C. J. Ducoté, incoming president.

"Louisiana," Dr. E. B. Craighead.

"City Doctors," Dr. C. Pierson, of Alexandria.

"Country Doctors," Dr. Quitman Kohnke.

"The Sane," Dr. Hays, of the State Insane Asylum.

"Orleans Parish Medical Society," Dr. L. G. LeBeuf.

"Tulane Alumni Association," Dr. Wm. M. Perkins, its president.

"The Ladies," Dr. J. M. Barrier.

"Medical Department of Tulane University," Dr. J. P. Halsey.

"New Orleans Polyclinic," Dr. H. D. Bruns.

"The Lay Press," Dr. Isadore Dyer.

"The Medical Press," Mr. M. Picard.

Among others who responded were Dr. A. F. Barrow for the Board of Medical Examiners; Dr. R. M. Van Wart, "Our Neighbors," and Dr. Fred J. Mayer on "The Short Speech."

The hour was late when the festivities were declared over and guests and hosts were unanimous in declaring the banquet one of the most enjoyable they had ever attended.

## Abstracts, Extracts and Miscellany.

### Department of Obstetrics and Gynecology.

In charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER, New Orleans

THE CALCULATION OF THE DATE OF DELIVERY IN PREGNANCY.—W. J. CAIE. (*British Medical Journal*) gives the result of his records in 200 cases under his observation, only those being recorded in which, on enquiry, the woman gave an exact date for the onset of the last menstrual epoch, and the results are as follows:

(The estimate was made according to Naegeli's method, which consists of counting back from the date of the onset of the last menstrual period, adding seven days (in Leap Year six days if February be included) and counting a year forward from the resulting date).

A. Labor occurred before the estimated date in 53.40 per cent.

B. Labor occurred after the estimated date in 24.50 per cent.

C. The estimated date was correct in 16.04 per cent.

The remaining percentage is accounted for by immature and premature labors.

In A. labor occurred on an average of 3.4 days before the estimated date.

In B. labor occurred on an average 1.8 days after the estimated date.

There are therefore two points about this analysis which should be noted:

1. The percentage of labors occurring before the estimated date is far in excess of those occurring after it.

2. In Class A. the average number of days is greater than in Class B., or, in other words, those in which the date of delivery is after the estimated date are nearer the latter than those in Class A.

He argues, then, from these facts that, in Naegeli's method, the number of days added on is too great and that by adding a fewer number of days a still nearer approximation to the date of delivery might be got and this conclusion comes into line with the average length of gestation arrived at from the authorities quoted, which is less than that given by Naegeli. If two days less be

added the result corresponds both to the average length of pregnancy which he quoted and with the average in his Class A. Where available—which, unfortunately is seldom, Lowenhardt's method will be found to be more accurate than Naegeli's, and the two will be found to correspond almost exactly, provided fewer days are added to the latter.

In fifty other cases which he calculated by Lowenhardt's method, the date of delivery was in all within 1.6 days of the estimated date. Lowenhardt's method consists in counting the number of days between the last menstrual period and the one preceding that and multiplying by ten the date can then be got by tables.

---

## Department of Therapeutics.

---

In Charge of DR. J. A. STORCK, New Orleans.

---

DUNBAR ANTITOXIN IN HAY FEVER.—Thirty-six cases of hay fever treated with Dunbar's antitoxin are reported by Stein. Regarding the remedy more as a prophylactic one, Stein found that in all but a few cases it proved efficient. When used during the height of an attack, it usually modifies the severity, but never entirely relieves the patient. In one case the symptoms were easily prevented from developing when the remedy was used in time. One case obtained no relief whatever. In another case the severity of the symptoms was lessened so that the patient was scarcely disturbed. A peculiar feature in this case was that the patient could not use the serum in the eyes without producing considerable redness and swelling of the conjunctiva. To obtain the greatest degree of immunity, Stein found that the remedy must be applied before the onset of an attack. When the disorder is once fully established patients do not obtain the relief expected.—*Journal of the A. M. A. April 8, 1905.*

THE THERAPEUTIC USE OF FLUORESCENCE IN THE HUMAN ORGANISM.—W. J. Morton discusses the production of fluorescence in the tissues of the human organism by use of fluorescing solutions, electricity, etc. He holds that it is a sort of phototherapy dependent on the same principles for its curative effects. It produces



effects by the fluorescent excitation of the absorbed drugs, not due to the Röntgen ray or to radium, but probably to the fluorescent light. Morton has found it therapeutically useful in pulmonary tuberculosis, as well as in local tuberculosis elsewhere, and especially in cancer, of which two successful cases are reported.—*American Medicine*, April 8, 1905.

**DYSENTERY TOXIN AND ANTITOXIN.**—Charles Todd has made a study of the productions of toxins by dysentery bacilli and their counteractions by antitoxins. He finds that old cultures of *B. dysenteriae*, Keruse, contains a soluble toxin, which is also contained in the bodies of young bacilli. The horse and rabbit are very susceptible to this toxin, the guinea pig, rat and mouse being very resistant. Immunization of the horse gives rise to an antitoxin. The toxic power of the serum of horses so immunized may reach a very high value, .001 cc. being sufficient to small rabbit against 20 minimal lethal doses of toxin. The Shiga dysentery bacillus and three strains of a bacillus isolated from cases of asylum dysentery in England, by Eyre, were found to yield a similar toxin and this toxin was neutralized by the antitoxin prepared by means of the toxin from Kruse's bacillus. This is considered a strong point in favor of the identity of the above bacilli. Attempts to obtain a soluble toxin from *B. dysenteriae*, Flexner, and from two races of the bacillus isolated from cases of summer diarrhea by Duval in Baltimore and New York, were successful.—*Ibid*.

**A NEW REMEDY IN APHTHAE (SPRUE).**—Sprue, says Hartigan, is a complaint so baffling, so difficult to cure, recurring so frequently after apparent recovery, that any hint as to its treatment is worth recording. The disease shows itself in various forms, and many seemingly favorable cases prove most intractable, while others make rapid and complete recoveries. In the majority of cases which quickly respond to treatment, the disease is confined to about the lower eighteen inches of the bowel, while in the intractable cases the upper portion of the colon and probably lower part of the ileum are involved. Hence, in the former, the almost certain efficacy of copious antiseptic lavage, while in the latter they have little or no effect on actual course of the disease. Little is known of the etiology of sprue. Its fatality is due to inability to assimilate food. The usual symptoms are wasting, sore tongue and frequent and abundant frothy stools. The patients are unable to take the mild-

rest or simplest nourishment on account of the pain caused to the mouth and tongue and the almost immediate evacuation thereby brought on. The value of antiseptics applied locally to the bowel has been proved. Boric acid, however, produces headache and increases digestive troubles. Carbolic acid is ill-borne; salol makes the stools more healthy, but does not cure the disease; perchlorid of mercury and naphthol are inefficient. Cyllin, a new disinfectant of the cresol series, given in the form of intestinal platinoids, 3 m. cyllin in each is well borne, the number of stools rapidly diminishes, the bowels are regulated and the general condition of the patient improves. The platinoids may be given every second hour if necessary, but rarely more than eight a day are required. They are best given an hour after food. All pain and tenderness over the lower part of the abdomen disappear; there is a steady increase in weight and the patient is soon able to return to the ordinary diet. The cases treated solely by rest and milk diet take a much longer time to get well, and their recovery is often not complete. Relapses, particularly on returning to a hot climate, are frequent.—*Journal A. M. A.*, April 8, 1905.

---

## Department of Nervous and Mental Diseases.

---

In Charge of DR. P. E. ARCHINARD and DR. ROY M. VAN WART,  
New Orleans.

---

MISUSE OF TENDON TRANSPLANTATION—Oppenheim (Berlin. *klin. Wochenschr.*, No. 7, 1905) reports three cases in which tendons were transplanted for progressive conditions.

The first case was one of progressive muscular atrophy where the tendo Achilles had been split and a part sutured to the peronei tendons. Six months later the transplanted part could not be used for abduction of the foot. The part left in position was very weak and showed a partial reaction of degeneration.

The second case was one of anterior poliomyelitis chronica where the tendons had been transplanted while the disease was still progressing.

The third case proved to be a tumor of the vertebræ which produced paralytic phenomena from pressure on the cord.

A tendon transplantation was performed in the early stages while there were pains and paralytic symptoms in the left leg. Oppenheim concludes that in every case before operating one should be sure the condition is not a progressive one.

TREMOR ASSOCIATED WITH MERCURIAL POISONING.—Two cases are reported by Moore (*Clinical Journal*, April 19, 1905). The first case was one of paralysis agitans in a male aged 68 who made his living as a glass silverer. The tremours were more marked than is usually the case in paralysis agitans and were also more active. Rest in bed improved his condition but did not completely remove it. On resuming his occupation they became gradually worse. Moore regarded this case as one of paralysis agitans aggravated by mercurial poisoning.

The second case was one of a man 45 years of age who worked as a thermometer maker and was probably poisoned by the vapor. This patient had to be carried into the hospital and was thought to be mentally deranged. He was sallow and somewhat anemic. There was a tremor of both hands and feet on his attempting to move them. He slowly improved under treatment. These cases are interesting as they differ very much from the poisoning seen after the use of mercury for medicinal purposes.

---

## Miscellaneous.

---

MR. PRESIDENT—Your Committee on Medical Legislation, appointed at the last meeting of the Philadelphia County Medical Society, has the honor to make the following report on the work done at Harrisburg:

Your committee found two medical bills before the Legislature, both vitally affecting, directly and indirectly, the medical profession of our state.

The first was a bill known as the Hoke Bill, which consisted of amendments to the law of 1893, and the second bill legalizing a so-called system of medicine, termed "Osteopathy," and regulating the practice of and licensing of Osteopaths. Through the united efforts

of your committee the Hoke Bill passed both houses of the Legislature by an almost unanimous vote. Notwithstanding our efforts, the Governor vetoed the bill, on account of some technical inaccuracies.

Twice was the Osteopathic bill defeated in the house, but by strong political efforts the bill finally passed. The senate passed it on original and final readings. This enabled the bill to be brought before the Governor for his signature or veto. Your committee found it necessary to use every effort to prevent the measure from becoming a law. The committee had an appointment with his Excellency, Governor Pennypacker, April 21st, to hear the discussion on the Osteopathic bill. Besides your committee, there were present, the President of the State Medical Society, Dr. Koenig; President of the Allegheny County Medical Society, Dr. Heckel; Dean Holland; Representatives from the Dauphin County Medical Society, from the Homeopathic Medical Societies and the Osteopaths. The discussion lasted for more than three hours. However, we report with great satisfaction, that his Excellency, Governor Pennypacker, vetoed the Osteopathic Bill in the following language:

"I file, herewith, in the office of the Secretary of the Commonwealth, with my objections, Senate Bill No. 115, entitled 'An Act to regulate the practice of and licensing of osteopaths in the State of Pennsylvania, the establishment of a board of osteopathic examiners representing the Pennsylvania Osteopathic Association, and providing for the punishment of persons violating the provisions of this act.'"

The purpose of this bill is to establish a state board of osteopathic examiners, to consist of five members to be appointed by the Governor. This board is directed to issue certificates of qualification to practice osteopathy to all applicants having a diploma from a legally recognized and regularly incorporated College of Osteopathy. It is further provided that licenses shall be issued to all persons who have practiced osteopathy in the state for four years prior to July 1st, 1903, and to such persons as now legally hold a diploma from a reputable and legally conducted college of osteopathy. It further provides that the applicants after July 1st, 1905, shall have attended for at least three separate years such a college of osteopathy and shall be examined by the board in certain designated branches, and



that those who apply after July 1st, 1907, shall in like manner have studied for four separate years and submit to such examination.

Section 7 provides that "any person who shall practice or attempt to practice osteopathy in treating diseases \* \* \* without having first obtained the license herein provided for \* \* \* shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not more than one hundred dollars, or by imprisonment in the county jail for a period of not more than ninety days for each offense."

There is nothing in the bill to indicate what constitutes the science of osteopathy. An effort to solve the query by an examination of the printed literature of the science is not very successful. Dr. A. T. Still, who is the founder of the science, and is still living, in his autobiography, says: Who discovered osteopathy? Twenty-four years ago, the 22nd day of next June, at 10 o'clock, I saw a small light in the horizon of truth. It was put in my hand, as I understood it, by the God of Nature. That light bore on its face the inscription: "This is my medical library, surgery and obstetrics. This is my book with all directions, instructions, doses, sizes, and quantities to be used in all cases of sickness, and birth, the beginning of man: in childhood, youth and declining days." I am something of what people call 'inspired.' \* \* \* The other classes have different names for it—clairvoyancy and clairaudient. Sometimes I was so clairvoyant that I could see my father twenty miles from home; I could see him very plainly cutting a switch for my brother Jim and I, if we hadn't done a good day's work. That is called clairvoyance. Then I could hear him say: 'If you don't plow faster I will tan you twice a week.' That is clairaudience." In his *Philosophy of Osteopathy*, he says: "Principles to an Osteopath means a perfect plan and specification to build in form a house, an engine, a man, a world, or anything for an object or purpose. To comprehend this engine of life of man which is so constructed with all conveniences for which it was made, it is necessary to constantly keep the plan and specification before the mind, and in the mind, to such a degree that there is no lack of knowledge of the bearings and uses of all parts." However true this may be, it is too indefinite to give the ordinary layman any very accurate description of the science. Since the bill refers to other schools for the practice of

medicine, it is probably a school and it appears from Section 5 that the holders of certificates are not to prescribe or use drugs or operative surgery. The main reliance would appear to be upon the manipulation of muscles and nerves, but this conclusion is entirely an inference and may be incorrect. It must be assumed, however, that there is some scientific truth which those interested in osteopathy have discovered and that it is utilized in the treatment of diseases. The study of medicine and surgery has been conducted for ages, and we have much legislation which is applicable to its conduct. Under the act of May 10, 1893, a Medical Council was established which issues licenses after examinations, authorizing the applicants to practice medicine and surgery. If, then, osteopathy represents some truth in the treatment of disease, the knowledge and use of which would be beneficial to the diseased and the injured, with what consistency can these practitioners be prevented from making such use of it? Why should their patients be deprived of such benefit as may result from the discovery? If, however, this bill should become a law, the physician who would practice or attempt to practice what the osteopaths have discovered would be punishable by imprisonment for ninety days. This would be possibly a great loss to the community and certainly a great wrong to the physicians. The whole thought of the establishment of schools of medicine is unscientific. All those engaged in such pursuit ought to be seeking to ascertain the truth and to accept it wherever it may be found. The approval of this bill would appear to give the authority of the state to a system of practice in the healing art which excludes the use of medicine and the use of surgery. Why should there be an attempt to so confine the operations of the mind? If both drugs and surgery are useless they may be rejected, but if they should at times be found to be beneficial why should any science for the enforcement of a theory make the effort to exclude their use?

Should the bill become a law licenses would be issued by the State Board of Osteopathic Examiners, and not by the Medical Council of Pennsylvania, which would be an anomaly in our legislation upon the subject.

For these reasons the bill is not approved.

Before closing this report, your Committee would suggest and also urge that your Society have a Standing Committee upon Medi-

cal Legislation, said committee to look after such laws that concern the profession at large and the individual profession, the expenses connected with the same to be met by the Philadelphia County Medical Society.

ALFRED STENGEL, M.D.,

H. A. HARE, M.D.,

HENRY BEATES, M.D.

J. MADISON TAYLOR, M.D.,

CHARLES H. FRAZIER, M.D.

J. M. ANDERS, M.D., President, *Ex-Officio*.

L. WEBSTER FOX, M.D., Chairman.

*Committee.*

---

## Louisiana State Medical Society Notes.

---

In charge of DR. P. L. THIBAUT, Secretary, 141 Elk Place.

---

### Parish Society Chartered.

CALDWELL PARISH MEDICAL SOCIETY. Organized, May 2, 1905. Chartered, May 8, 1905. Charter members, 7. Meets first Thursday in January, April, July and October. Officers: President, Dr. S. B. Fluitt, Cotton Plant; Vice President, Dr. E. D. Gardner, Clarks; Secretary-Treasurer, Dr. O. A. Biggs, Grayson. Other charter members: Drs. J. A. Biggs, Grayson; S. Johnson, Clarks; W. G. Martin, Clarks; J. L. Miller, Kelly.

UNION PARISH MEDICAL SOCIETY has applied for a charter. Details will be given in the next issue of the JOURNAL.

1905 MEETING.—A resumé of the 1905 meeting appears in another part of the JOURNAL. This meeting has shown us that the organization of parishes can well promise to be firm and permanent. There are some weak links in the chain and it will devolve upon the present administration to strengthen them.

STANDING COMMITTEES.—The president will announce the standing committees and the chairmen of sections in the next number of the JOURNAL.

## Orleans Parish Medical Society Notes.

*President, Dr. L. G. LEBEUF.*

*Secretary, Dr. ALLAN C. EUSTIS,*  
141 Elk Place.

It is with pleasure that we are able to announce that the entire issue of bonds of the Society for the purchase of our new domicile has been subscribed to. The finances of the Society have never been in a better condition. The Domicile Committee, of which our present President was Chairman, deserves the thanks of the entire Society for the manner in which they handled the matter.

This Society had the pleasure of entertaining the Louisiana State Medical Society on the 9th, 10th and 11th of May and it was a social pleasure to us to be able to renew the past pleasant relations with our fellow practitioners from the other parishes. In numbers, this was the most successful meeting in the history of the State Society, while the quality of the papers read and their discussion were up to the usual high standard. On Thursday night, the Orleans Parish Medical Society entertained the visiting members at a banquet at the Hotel Grunewald, ably presided over by Dr. John F. Oechsner.

The Chairman of the Committee on Arrangements and the chairmen of the various sub-committees performed the duties assigned to them in a faultless manner, and to them is due in great part the success of the meeting.

We will again have the pleasure of entertaining the State Society next year, and we trust that that meeting will exceed in attendance the one just held.

---

## Medical News Items.

---

THE MISSISSIPPI STATE MEDICAL SOCIETY MET AT JACKSON in April, and Dr. E. H. Martin, of Clarksdale, was elected President.

THE LOUISIANA STATE DENTAL SOCIETY MET IN THIS CITY May, 4, and the following officers were elected: Dr. V. K. Irion, president; Dr. M. C. Beauchard, first vice president; Dr. J. W. Tennesley, second vice president; Dr. H. P. Magruder, recording secretary; Dr. A. L. Plough, corresponding secretary; and Dr. Chas. Mermilliod, Sr., treasurer.



THE ALEXANDRIA BOARD OF HEALTH at its last meeting passed a number of ordinances in regard to health matters, and Dr. J. C. Schotel was appointed Sanitary Inspector.

THE VERMILLION PARISH MEDICAL SOCIETY held a meeting on May 7 and elected the following officers to serve for the ensuing year: Dr. J. T. Abshire, president; Dr. C. A. Schilling, vice president; Dr. C. J. Edwards, secretary and treasurer; Drs. R. J. Young and J. T. Abshire were elected delegates to the State Medical Society. The annual meeting will be held on July 4.

THERE WERE 99 CANDIDATES BEFORE THE LOUISIANA STATE BOARD OF MEDICAL EXAMINERS on May 4, and 90 passed. The following were successful: Miss C. C. Jauquet, Stewart C. Johnson, J. T. Halsey, L. O. Clark, Ernest Bloom, J. A. Slack, R. B. Pryor, F. Hamilton, H. R. Shands, J. Santer Mueller, R. A. Kearney, M. D. Haspell, R. E. Chalker, E. J. Riche, J. M. Ehlert, J. R. Mahone, Jr., J. A. Seawell, J. E. Henderson, J. M. Moseley, C. B. Harrington, W. A. Fletcher, S. L. Hollingsworth, A. J. Newman, J. P. Freilsen, P. J. Kahle, A. K. Naugle, C. E. Lehmberg, C. W. Phillips, B. C. Abernathy, T. R. Sartor, R. H. Wheat, J. H. Norman, Jr., P. B. Salaticht, J. W. Mayes, A. H. Boerey, J. K. Thomb, H. L. Lazarre, J. W. Plauchet, W. A. Boyce, F. O. Darby, G. O. Sanders, F. W. Champerois, John Pugh, C. J. May, C. T. DeLoach, J. M. Wheelis, Charles A. Evans, R. A. Comaux, Howard Clarke, P. J. Kerlin, C. E. Hutchinson, V. B. Reynaud, J. L. Purser, W. H. Brent, W. J. Schmidt, Judge James, A. S. Walker, John Tolson, S. N. Jordan, R. W. Vincent, P. W. Bohny, J. C. Denman, J. H. Hargrave, J. A. Joyner, M. Williams, W. T. Wilkinson, Jr., F. H. Watson, J. F. Pugh, Jr., J. O. Duhon, L. F. Magruder, J. O. Pratt, H. C. Cole, E. L. Lackert, J. C. Burdette, E. E. Dickinson, T. E. Sanders, M. L. Nance, Jr., E. W. Mahler, J. G. Yearward, F. V. Jordan, J. E. Garrison, A. R. Carter, J. M. Cunningham, S. J. Pate, G. C. Boudousqui, W. T. Jones, F. A. Baker, Louis B. Crawford, H. E. Connor (colored).

THERE WERE 83 GRADUATES IN MEDICINE AT TULANE ON MAY 3, and 10 in Pharmacy.

THE CHARITY HOSPITAL ALUMNI ASSOCIATION met in this city

on May 8 and elected the following officers: Dr. Gordon King, president; Dr. V. C. Smith, vice president; Dr. Carroll Allen, secretary; Dr. Sidney K. Simon, treasurer.

THE NEW ORLEANS COLLEGE OF PHARMACY HELD ITS GRADUATION EXERCISES on May 11. Diplomas were bestowed on twenty pupils, including three ladies.

NEW STATE DEPARTMENT OF HEALTH FOR PENNSYLVANIA.—Governor Pennypacker has signed the bill passed by the Legislature at its recent session abolishing the State Board of Health and establishing in its stead a Department of Health whose head shall be clothed with unlimited authority in safeguarding sanitary conditions in the State. The Commissioner of Health contemplated by the new act must be a physician of at least ten years' experience, and he is to receive an annual salary of \$10,000. He shall be aided by an advisory board of six members appointed by the Governor, four of whom shall be physicians and one civil engineer, to serve without salary, the State, however, paying their necessary expenses. The State shall be divided into ten health districts, each in charge of a physician of at least five years' experience, who shall receive an annual salary of \$2,500.

THE POLICE JURY OF CALCASIEU PARISH DONATED \$1,000 for the establishment of a Sanitarium at Lake Charles.

THE JOURNAL ACKNOWLEDGES A FRAMED PICTURE OF GO-SHONO, the Apache Medicine Man, sent by the Mellier Drug Co., of St. Louis.

DR. WILLIAM H. DALRYMPLE in charge of the Veterinary Department of the Agricultural Experimental Station, of the Louisiana State University, at Baton Rouge, has been notified of his unanimous election to membership in the Royal Institute of Public Health, London, England. This is one of the most important bodies connected with the public health in Great Britain, and is under the patronage of King Edward.

PERSONAL: Dr. Jos. Martin left during the month for Baltimore to spend several weeks attending special lectures at the Johns Hopkins University. Drs. H. B. Gessner and Sam Logan have also gone to the Johns Hopkins University to do post-graduate work.

Dr. E. D. Bondurant, of Mobile, was elected president of the State Medical Association of Alabama.

Dr. U. E. G. Dyer has moved from Cotulla to Ft. Worth, Texas.

Dr. E. D. Martin attended the meeting of the Mississippi State Medical Association at Jackson, in April.

Dr. I. T. Newton has located at Monroe, La., to practice, after spending some years at Little Rock.

Dr. A. W. DeRoaldes was honored by the presentation of the Picayune Loving Cup this year, and his many medical friends congratulate him on this worthy recognition of the good work he has done for the Senses Hospital.

Dr. W. P. Simmons has returned to Glencoe, La., to practice his profession.

Dr. C. J. Ducoté, of Cottonport, La., was elected President of the Louisiana State Medical Society.

Dr. John J. Castellanos was made an honorary member of the State Medical Society at the last meeting. The doctor has practiced for fifty years.

DEATHS: Dr. James Porter Parker died on April 27 at his home in New Orleans.

Dr. Albert A. Batchelor died at his residence, Bella Vista, at Pointe Coupee, on May 3. The doctor was sixty-three years of age.

Dr. J. C. Allen, of Baton Rouge, died at his home on April 28.

THE TEXAS STATE MEDICAL ASSOCIATION held a most successful meeting at Houston on April 24-28. Not only was the business of the Association admirably handled, but the several sections indicated as high a degree of merit in the papers presented as could be possible in any body of men of such varied interests. The discussions were especially strong and salient. The attendance was quite large and representative. A number of invited guests of the Association were present from other states. Among these were Dr. A. E. McDonald, of New York; Dr. John R. Punton, of Kansas City; Dr. J. F. Searcy, of Tuscaloosa, Alabama, and Dr. E. Lanphear, of St. Louis. Louisiana was numerously represented in the persons of Drs. I. M. Callaway and Oscar Dowling, of Shreveport; F. R. Tolson and Fred J. Mayer, of Lafayette, H. D. Bruns, R. M. Van Wart and Isadore Dyer, of New Orleans.

The President of the Association, Dr. F. E. Daniel, editor of the

*Red Back*, was most gracious in his welcome to the above gentlemen and extended the courtesies of the floor to all of them.

With receptions and personal attentions the meeting might be called eventful to those of us who enjoyed this Texas hospitality. The Association decided to publish its own journal, beginning with the coming year.

There are some 1,500 members of the Texas State Association, and of these about 400 were registered at this meeting.

The next meeting will take place at Fort Worth. The officers elected for the ensuing year were as follows: President, J. Edward Gilcreest, Gainesville; Vice President, B. Marvin Grace. Seguin; Oliver J. Halbert, Waco; Thomas A. Rape, Ballinger; Councillors, Luther A. Grizzard, Abilene; Thomas J. Bennett, Austin; Green L. Davidson, Wharton; John T. Moore, Galveston; Benjamin F. Calhoun, Beaumont; Orator, M. L. Moody, Greenville; Board of Trustees, Frank D. Thompson, Fort Worth; John S. Langford, San Antonio; W. R. Blailock, Dallas; Chas. E. Cantrell, Greenville; Samuel C. Red, Houston.

---

## Book Reviews and Notices.

---

*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

---

*A System of Practical Surgery*, by VON BERGMANN, VON BRUNS and VON MIKULICZ. Translated and edited by WILLIAM T. BULL and WALTON Martin. Lea Brothers and Company, New York and Philadelphia, 1904.

The names of the German surgeons who edit these volumes are well known the world over as among the most famous in experience and reputation among the surgeons of today.

Boyer, a learned French surgeon of the early part of the last century, felicitated the surgery of his day in that it was well nigh perfect; he did not believe there was room for further improvement. But what would he say today after going through the five volumes of this most admirable work? On the pinnacle which surgery has, indeed, now reached, the surgery of Boyer's day seems far down in the lowlands, but does not this position of eminence merely give one more power to see "what is yet to be?" Would any surgeon of large reading and experience dare maintain there are no more fields to conquer? But a study of these volumes does show how great the advance has been in surgery, for here we find the best work of the great world of active surgeons presented by men most competent to judge. We have at once the best



German and the best American product. The names on the title page are three of the most virile surgeons alive today, and the editorial supervision of the American editors has greatly enhanced the value of the work, not only to American and English, but to all surgeons. A study of these volumes has convinced the writer of this notice that they "will be found of inestimable value to the student and the scientific surgeon, and, at the same time, a trustworthy guide to the best and most recent method of practice," to use the language of the distinguished American editor.

---

*International Clinics*, edited by A. O. J. KELLY, A.M., M.D., Volume IV., Fourteenth Series, 1905. Philadelphia, J. B. Lippincott & Co.

This volume is rich in information contributed by men of standing in the medical profession. We mention here a few contributions which are of more than passing interest:

Indications for Dechloridation Treatment, by Adolphe Javal, M.D., a study which contains some practical suggestions in the treatment of certain stages of Bright's disease;

The Differential Diagnosis of the General Enlargements of the Liver, by Alexander Crombe, C.B., M.D., contains hints worth knowing;

Functional Heart Murmurs, Their Causation and Diagnosis, by ROBERT DAWSON RUDOLPH, M.D., (Edin), M.R.C.P. shows much knowledge of these conditions which are at times so puzzling.

The surgeon will find the article on radium, by Myron Metzenbaum, B.S., M.D., also the one on the operative treatment of constipation, by W. Arbuthnot Lane, M.S., (London) to be abreast of our knowledge on these subjects.

The volume as a whole contains excellent articles. The illustrations and figures are numerous and good.

STORCK.

---

*Case Teaching in Surgery*, by BURRELL and BLAKE, Philadelphia. P. Blakiston's Son & Co., 1904.

This little book comprises the histories and physical examination of some seventy-five cases, illustrating a great variety of surgical conditions met with in practice. The student, with the data furnished, is expected to formulate the diagnosis. As surgical exercises, these histories should prove very valuable to the instructor in surgery in carrying on his teaching of the higher classes. They embody the method carried out at Harvard by the authors. They ought to be very useful in the imparting of clinical instruction.

P.

---

*The Surgical Treatment of Bright's Disease*, by DR. GEORGE M. EDEBOHLS. Frank F. Liseckis, New York, 1904.

The work consists in part of the various articles on the surgical treatment of Bright's disease, published in various medical journals by the distinguished surgeon, who has so popularized renal decapsulation. About three-fifths of the book is new matter hitherto unpublished. A bibliography quite complete to date adds usefulness to the volume.

We advise all who wish to be thoroughly conversant with the subject, so as intelligently to advise consulting patients, to get this work, as nowhere else can the desired information be found in such complete form.

P.

---

*A Hand-Book of Surgery for Students and Practitioners*, by FREDERIC R. GRIFFITH, M.D. Philadelphia, W. B. Saunders & Company, 1904.

This is intended as a "working guide" for the student and general practitioner, and as such ought to prove useful, as it is, though brief, yet comprehensive and up-to-date.

P.

*Eye, Ear, Nose and Throat Nursing*, by A. EDWARD DAVIS, A.M., M.D., and BEAMAN DOUGLASS, M. D. F. A. Davis & Co., Philadelphia.

This work, which was written especially for the benefit of nurses, is replete with points of practical information and suggestion for the student and doctor as well, and covers a field usually omitted from the text books on diseases of the eye and ear, nose and throat. Special attention is given to the preparations necessary for certain operations, and the post operative treatment and nursing, upon which the final result so often depends.

DEROALDES & KING.

*Surgery—The Medical Epitome Series*, by MAGEE & JOHNSON. Lea-Brothers & Company, Philadelphia and New York.

This little volume of surgery is as complete and as perfect as any hand-book on the subject. It practically covers the entire field, and, though brief, is most comprehensive. Whereas it was written specially for students, it would be an addition to the library of any physician, and is of special value to the general practitioner, who might be called upon in a surgical emergency. It is all the editor claims for it.

MARTIN.

*Medical Latin*. By W. T. ST.CLAIR A.M. P. Blakiston's Son & Co., Philadelphia, 1905.

One of the well known Blakiston's quiz compends. This is the second edition (revised) of the compend of Medical Latin, designed expressly for elementary training of medical students. The Latin-English and the English-Latin vocabularies following the lessons on Latin may prove of great service to others than students.

DUPAQUIER.

*Medical Laboratory Methods*. By HERBERT FRENCH, M.A., M.D. (Oxon) M.R.C.P (London). W. T. Keener & Co., Chicago, 1904.

This subject is part of all modern books on Diagnosis, but these are now bulky volumes. This volume is intended to be a small hand-book dealing with the chemical and microscopical tests and investigations which are most useful to medical men. The object has been to detail the commoner methods, pointing out the conclusions which may be drawn from the various tests, but laying stress upon the fallacies to which each is liable. The book deals, not with the examination of patients, but with that of fluids or substances obtained from them, and bedside methods have been excluded.

DUPAQUIER.

*New Methods of Treatment*, by DR. LAUMONNIER. Translated and edited from the second revised and enlarged French edition, by H. W. SYERS, M.A., M.D. (Cantab). W. T. Keener & Co., Chicago 1904.

That which chiefly distinguishes this book from the published formularies of the newer drugs and remedies is the summary account of pathological physiology and pathogeny placed at the beginning of each chapter, so that the mechanism of therapeutic action may be deduced from the knowledge of the functional alterations which give rise to disease. The author trusted that this innovation would be appreciated by his readers and he was certainly right. It is indeed pleasant reading. But, in practice, the agents or material employed to effect the therapeutic action, very often lack of virtue, most unfortunately so. How strange that so much of the action reported cannot be corroborated by others, though the material is exactly the same as the one advertised and though the administration of it is followed to the letter and strictly so. In this edition appear articles on adrenalin, salicylate of methyl, ulmarene, quinoformine, collargol and colloid metals, which have lately been much dis-

cussed. The study of these colloid metals, if it be followed up and the results prove to be such as are hoped for, will allow of the development of a new subject relative to the therapeutic action of certain ferments recently experimented on, namely, oxydases, reductases and kinases. The remarkable properties of these ferments may perhaps be attributed to the traces of radio-active substances which they contain. Here will probably be found a new and fruitful therapeutic field, but as yet it would be premature to undertake action therein, as definite and harmonious results are so far lacking. If you care to understand or know anything about new materia medica and new therapeutics, there is no more pleasant book to read than this. The translation is perfect.

DUPAQUIER.

---

*The Practical Medicine Series of Year Books*, Vol. 6. *General Medicine*. The Year Book, publishers, Chicago.

The latest reports on Typhoid, Malaria, Diseases of the Mouth, Oesophagus, Stomach, Intestine, Liver, Hysterical fever and Adiposa dolorosa, are included in this volume. The usefulness of this publication is well established, and praising it is now needless.

DUPAQUIER.

---

*Text-Book of Alkaloidal Therapeutics*, by W. F. WAUGH, M. D. and W. C. ABBOTT, M.D., with the collaboration of E. M. EPSTEIN, M.D. The Clinical Publishing Co., Chicago, 1904.

A condensed resume of all available literature on the subject of the active principles added to the personal experience of the authors. That this therapeutic movement (Alkalometry) should be ignored is wrong, for its aim, namely, the smallest possible quantity of the best attainable means to produce a desired therapeutice result, is very attractive; since, as a matter of fact, we all feel that most of our galenical formulas are crudely and inaccurately prepared. The temptation is great to dispense our own medicines, nowadays, anxious as we are to depend on exact drugs to obtain results. Yet, alkalometry is far from supplying us with all that we need. We believe in giving it a fair trial, every time the occasion presents itself and therefore recommend this work as a valuable guide in our practice.

DUPAQUIER.

---

*Summer Diarrheas of Infants*. By H. ILLOWAY, M.D., New York. E. R. Pelton, New York, 1905.

As our heated term approaches, it is opportune to have a book of this kind. But, it is regrettable that the author does not accept the latest etiological factor, viz: Shiga's or Flexner's bacillus; for, a year later, with reports on practical experience with serumtherapy, the value of the book would have been greatly enhanced.

DUPAQUIER.

---

*A Manual of Fever Nursing*. By REYNOLD WEBB WILCOX, M.A., M.D., LL.D. Illustrated. P. Blakiston's Son & Co., Philadelphia, 1904.

This volume contains the lectures on fever nursing which were delivered in substance to the nurses of St. Mark's Hospital during the season of 1903-04. Practitioners as well as nurses ought to get the book and carry out carefully the instructions it contains in their practice rather than depend blindly on antipyretics of various denomination and the reckless method of cutting all fevers down to the normal and far below at the expense of the patient. No better book can be found on the doctor's desk.

DUPAQUIER.

---

*Physiological Feeding of Infants*. By ERIC PRITCHARD, M. A., M.D. (Oxon) M.R.C.P. (London). W. T. Keener & Co., Chicago, 1904.

A practical handbook of infant feeding and key to the physiological



nursery chart. A brief criticism of the more important methods of hand-feeding employed at the present time, and indications of the main principles in the scientific and rational management of the infant's dietary, explained in the most practical way, form the substance of this excellent little book.

DUPAQUIER.

---

*Modern Ophthalmology.* By JAMES MOORES BALL, M.D. F. A. Davis & Co., Philadelphia, 1904.

The two features in this work calling for special favorable mention are: First, the up-to-dateness of its matter and the arrangement of the text embodying in one volume the embryology, physiology and pathology of the eye; Second, the profuse illustrations, well executed throughout, so important in elucidating the text. These characteristics go a long way to make it a valuable addition to our library. We take this opportunity to correct a quotation of the author on page 333 when treating the subject of descemetitis. He states that Bruns contends that there cannot be such a disease as serous iritis, since descemetitis, the symptom on which the diagnosis of serous iritis was long made to rest, is most frequently the principal symptom of acute plastic choroiditis. Bruns really contends and supports his position by citing cases in every instance that descemetitis is a symptom of plastic inflammation of the uveal tract, the focus being sometimes in the posterior part and sometimes in the anterior part. In the latter case the ciliary body and iris are as a rule also involved in the inflammatory process. As a corollary he believes there cannot be any serous iritis.

ROBIN.

---

*Refraction and How to Refract.* By JAMES THORINGTON, A.M., M.D. P. Blakiston's Son & Co., Philadelphia.

Having commented not so long ago, upon this excellent work, we note with pleasure the appearance of a third edition much improved by cuts and illustrations.

ROBIN.

---

*Strabismus or Squint; Latent and fixed.* By FRANCIS VALK, M.D., G. P. Putnam Sons, New York, 1904.

The views and theories expressed in this work accord so well with those held by us that we are glad to commend them to the profession. We agree with the author as to the normal position of the eyes and the essential cause of muscle imbalance, whether phoria or tropia. We also regard it of high importance that eyes be submitted not only to the prism test for imbalance, but particularly to the test of power in individual muscles with a view of determining whether a normal ratio exists. We have performed Valk's tucking operation for shortening of the eye muscles a number of times, and find it well adapted to its purpose.

ROBIN.

---

*Progressive Medicine.* A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by HOBART AMORY HARE, M.D., assisted by H. R. M. LANDIS, M.D. Lea Brothers & Company, Philadelphia and New York, 1904.

This volume, IV, December, 1904, contains valuable contributions to the diseases of the digestive tract and allied organs; Liver, Pancreas, and Peritoneum-Anesthetic, Fractures, Dislocations, Amputations, Surgery of the extremities, and Orthopedics, Genito-urinary diseases, Diseases of the Kidneys—and closes with a practical therapeutic referendum for the year 1904. There are a number of good articles in this volume and all is profit from the culture this fine publication imparts.

DUPAQUIER.



*A Compend of the Practice of Medicine.* By DAN'L E. HUGHES, M.D. Seventh Revised Edition by SAMUEL HORTON BROWN, M.D. Including a Section on Mental Diseases and a very complete Section on Skin Diseases. P. Blakiston's Son & Co., Philadelphia, 1904.

This book has been completely revised and rewritten. The typographical work is entirely new. The arrangement of the diseases has been changed considerably to conform with the more modern divisions of pathology. Introductory notes have been placed at the beginning of every section. Many new prescriptions and modern modes of theory have been incorporated in the text. The method of expression has been largely reconstructed, except in the section on mental diseases, in which the colloquial style of the previous editions has, to a great extent, been retained. One hundred and thirty-seven pages have been added, and twenty-seven illustrations have been inserted. Obviously, the number of diseases considered is greater. A large index and an unusually comprehensive table of contents are contained within the book. The new material worthy of especial remark, includes the articles on the classification and general characteristics of fevers, the blood and its examination, examination of sputum, examination of the stomach contents, urin analysis, physical diagnosis, and the introductory notes on symptomology placed at the beginning of each section. A table for the conversion of the apothecaries' system into the metric system has also been added.

DUPAQUIER.

---

*Transactions of the American Roentgen Ray Society.* Fourth Annual Meeting. Murdoch-Keer Press, Philadelphia, 1904.

We have at hand a most practical and valuable contribution in the field of X-Ray work. The study and practical application of the Roentgen Rays; the aim and object of the society has been well carried out. Every one of the papers contain very interesting, valuable and necessary points of information on their respective topics. The great number of articles and their lengthy discussions on skiagraphy serves to indicate the great importance now given this subject as a means of diagnosis in Renal Calculi, locating foreign bodies, fractures, etc. The technique necessary for obtaining accurate skiagrams form the very practical side of this important question and is thoroughly given by experienced men. Of practical interest also have been the contributions on the therapeutic effects the X-Rays in the treatment of epithelioma lupus and other affections. Those using static machines as a source of energy for exciting Crookes' tubes will find useful information on the care of these machines. The X-Ray operator has not been forgotten and the measures suggested for the prevention of burns are good and worthy of application.

CAZENAVETTE.

---

*The Medical Examination for Life Insurance,* by CHAS. LYMAN GREEN, M.D., St. Paul. P. Blakiston's Son Co., Philadelphia.

The second edition of this work is now out, and contains valuable information for every practitioner, but more especially for the medical examiner. Only those who have done much of this work are aware of the many problems which confront the doctor, and a wonder it is that insurance companies have so little trouble. The question of physical diagnosis does not play the only important role in life insurance, as every physician who has had any experience in such matters will attest. It is a specialty in itself, and whereas some colleges are attempting to give a course of instructions in this branch, the practitioner who has not had such advantages, must be instructed. Dr. Green's excellent work makes this possible. The ground is thoroughly covered. His book reads like a novel, and should be in the hands of every medical examiner. Each subject is

thoroughly dealt with, and in such a manner as to make it interesting to the reader. The mooted questions in Life Insurance are discussed, and many points not only for interest, but of which the general practitioner must of necessity remain in ignorance, are explained away. The book is most meritorious and deserves success.

MARTIN.

---

*Life Insurance Examinations*, by BRANDETH SYMONS, A.M., M.D. G. P. Putman's Sons, New York and London.

This little annual for the use of the medical examiner has been especially prepared. It is designed to fully instruct life insurance examiners, not only on the question of physical diagnosis, but as to their duties to the company and their relations with the patient and solicitors. All the work is condensed, it covers the ground fully and serves the purpose for which it is intended. A list of the contents will at once show the subjects dealt with, and these are in themselves a sufficient recommendation for the book and will give a very fair idea of the most important subjects in life insurance, of which the medical examiner as a rule is absolutely ignorant. It deals with the history of life insurance, fundamental principles, relations between the examiner and the company, personal history of disease, examination of women, family record, habits, residence, occupation, miscellaneous, physical examination, recommendation, relations with agents, frauds and fraudulent practices, chemical examination of the urine, and heart murmurs.

The subjects are clearly dealt with and the duties of the examiner well defined. The book is a most valuable aid, and whereas it does not go so thoroughly into the subject as the more extensive works, it fully covers the ground.

MARTIN.

---

*A Text-Book of Diseases of Women*, by BARTON COOKE HIRST, M.D., W. B. Saunders & Co., Philadelphia, New York and London.

That the writer of an excellent text-book of Obstetrics should be able to write an equally good work on Gynecology appears to be the opinion of many. But it is rare that text-books of both these branches of medicine are produced by the same author. Here Dr. Hirst is a very happy exception. He calls this latest creation of his "The Companion Volume of My Text-Book of Obstetrics." And it so proves itself to be.

The following are the most noticeable peculiarities of the book: 1. The adoption of the Anatomical rather than the Pathological Classification of diseases of Women. After a careful examination of this method it seems to the reviewer to possess some advantages.

2. The more thorough elaboration of the subject of Conservative Treatment.

3. A separate and distinct chapter, at the *end* of the book, on modern operative technic. Why this subject was not incorporated in the body of the book is rather difficult to understand.

4. The very large number of beautifully executed new and original plates and cuts.

In treating of the subject of Retroversion of the Uterus, the author extols the value of the pessary. And what he says of this little instrument or appliance is so true that it should appeal to the many who see relief only in surgery. Of all the various surgical methods advocated for the treatment of this trouble he recommends (beside those operations on the vaginal walls) only the Alexander and Ventro-suspension. And here, as elsewhere, his reasons are clear and practical. He reports having cured "severe cases of Epilepsy of some years' duration" by the last-named operation. While Dysmenorrhea (so often perplexing to the most experi-

enced) is discussed with unfortunate brevity, there is offered a just censure of the too frequent use of the dilator and curet in its treatment, especially when it exists in the unmarried. We find this surprising statement: "Perforation of the uterus with the curet has happened in the hands of the most experienced several times." There is a strong vein of conversation in his treatment of Uterine Fibroids, many cases of which he insists require no treatment at all. "If the woman has no discomfort; if the menorrhagia is moderate, or the patient past the menopause, and if there is no further growth of the tumor, etc., even palliative treatment is uncalled for and radical treatment is unjustifiable." He strongly condemns electricity except for the purpose of controlling hemorrhage. Judging from the ubiquitous conservatism seen in this work it seems to have been intended more for the student and general practitioner than for the specialist. All three, however, would profit through its study.

MICHINARD.

*Four Epochs of Woman's Life: Maidenhood, Marriage, Maternity, Menopause*, by ANNA M. GALBRAITH, M.D., with an introductory note by JOHN H. MUSSER. W. B. Saunders & Co., Philadelphia, New York, London. 1903.

This work is written for the instruction of the laity on subjects of which every woman should have a thorough knowledge. The language used is clear and comprehensive and can be easily grasped by those unfamiliar with medical subjects.

This is the second edition and contains some valuable additions, chief among which may be noted the remarks on Hemorrhage at the Menopause a Significant Symptom of Cancer. Such advice in the hands of women will be of immense value in the crusade to be made against cancer.

MILLER.

*Normal Histology and Microscopical Anatomy*, by JEREMIAH S. FERGUSON, M.Sc.M.D. D. Appleton & Co., New York and London, 1905.

The rapid development of medical science, by the extensive application of the exact methods of the laboratory, has increased the importance of an accurate and somewhat extended knowledge of microscopical anatomy, until now the medical student finds a ready command of the minute anatomy of the human body to be essential to the satisfactory comprehension of the sciences of physiology, pathology, bacteriology and clinical medicine.

Dr. Ferguson's new work presents a comprehensive view of the subject especially in the chapters dealing with the microscopical anatomy of the organs which serve as a field for the specialist in medicine.

The striking feature of the book is the illustrations. These are principally exact pictures of actual sections as viewed with known magnification. Another feature of value is the extensive bibliography arranged in accordance with the main subdivisions of the text. The work is completed by a chapter on the technic of collecting, mounting and staining of specimens. The book will no doubt become a standard text.

MILLER.

*The Mothers' Manual; A Month to Month Guide for Young Mothers*, by EMELYN LINCOLN COOLIDGE, M.D. A. S. Barnes & Co., New York.

This little work is intended for young mothers, or, those who have the care of children, and presents with singular clearness the information they need.

It is arranged in chapters, each dealing with the consecutive months of the first year of the baby's life and the subsequent years up to the eighth.



It can be recommended because of its simple, concise style, and most of all, because it is not intended, as many such books are, to prompt the mother to become her own family physician. It is not filled with prescriptions or chapters on diagnosis, but rather deals with the normal development of the child and prevention of disease. It is thoroughly in touch with the latest development of medical science and the physician can recommend it to those who need such instruction.

MILLER.

*Anatomy and Diseases of the Eye and Ear*, by D. B. ST. JOHN ROOSA, M.D., and A. EDWARD DAIRS, M.D. F. A. Davis Co. Philadelphia, 1904.

*Diseases of the Eye*, by CHAS. H. MAY, M.D. William Wood & Co., New York.

*Diseases of the Eye and Ear—Medical Epitome Series*—by ARTHUR N. ALLING, M.D., and OVIDUS ARTHUR GRIFFIN, M.D. Lea Bros. & Co., Philadelphia and New York.

These are all excellent little manuals upon diseases of the organs treated of, but to be perfectly frank we would be pleased to see the groaning presses given a holiday—even a temporary one. Why with the as yet unsurpassed Hand-book of Nettleship, the great text-book of Fuchs, and the beautiful, yet inexpensive atlases of Haab, the student yet needs to be "loaded to the guards" with extra texts on the eye passeth our understanding. Truly the day has come when a new medical text needs make clear some special *raison d'être* as its excuse for being.

H. D. B.

---

## Publications Received.

---

**J. B. Lippincott Co.**, Philadelphia and London, 1905.

*International Clinics*, by leading Members of the Medical Profession throughout the World. Vol. I, 15th Series.

**D. Appleton & Co.**, New York and London, 1905.

*Operative Surgery*, by Dr. Joseph D. Bryant. Vols. I and II.

**P. Blakiston's Son & Co.**, Philadelphia, 1905.

*The Detection of Poisons and Strong Drugs*, by Dr. Wilhelm Autenrieth, and translated from the German by Dr. William H. Warren.

*The Development of the Human Body*, by Dr. J. Playfair McMurrich. 2nd Edition, Revised and Enlarged.

*Appendicitis*, by Dr. John B. Deaver. 3rd Edition.

*Dental Surgery*, by Dr. A. W. Barrett.

*Physiological Therapeutics*. Edited by S. S. Cohen. Vol. XI.

*Surgical Diseases of the Genito-Urinary Organs*, by Keys, Jr.

### Miscellaneous.

*Report of the Department of Health of the Isthmian Canal Commission for the Month of December, 1904*, by Dr. W. C. Gorgas.

*The Johns Hopkins Hospital Reports, 1904*. Vol. XII.

*Twenty-first Annual Report of the Medical Director of the Cincinnati Sanitarium for the Year Ending November 30, 1904*.



*Transactions of the National Confederation of State Medical Examining and Licensing Board.*

*Report of the Commissioner of Education for the Year 1903. Vol. I.*

*Address Delivered Before the State Medical Association of Texas at Its 36th Annual Meeting, by Dr. F. Paschal.*

---

### Reprints.

*Memoranda Relating to the Discovery of Surgical Anesthesia and Dr. T. G. Morton's Relation to this Event, by Dr. William James Morton.*

*Variations, by Dr. F. W. Langdon.*

*Specific Therapy of Tuberculosis, by Dr. Chas. Denison.*

*The Prevention of Appendicitis, by Dr. Wm. M. Harsha.*

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)  
FOR APRIL, 1905.

CAUSE.	White.	Colored.	Total.
Typhoid Fever.....	6		6
Intermittent Fever (Malarial Cachexia) .....		3	3
Small Pox.....	1		1
Measles.....			
Scarlet Fever .....			
Whooping Cough.....	2		2
Diphtheria and Croup.....	4		4
Influenza .....	4		4
Cholera Nostras.....			
Pyemia and Septicemia .....		1	1
Tuberculosis.....	35	42	77
Cancer.....	19	4	23
Rheumatism and Gout .....			
Diabetes .....			
Alcoholism .....	2		2
Encephalitis and Meningitis.....	7		7
Locomotor Ataxia.....			
Congestion, Hemorrhage and Softening of Brain.....	16	8	24
Paralysis .....	3	2	5
Convulsions of Infants .....	2	7	9
Other Diseases of Infancy .....	21	11	32
Tetanus.....		5	5
Other Nervous Diseases .....	1	1	2
Heart Diseases.....	35	14	49
Bronchitis .....	1	4	5
Pneumonia and Broncho-Pneumonia.....	19	21	40
Other Respiratory Diseases.....	3		3
Ulcer of Stomach.....			
Other Diseases of the Stomach .....	6		6
Diarrhea, Dysentery and Enteritis.....	23	10	33
Hernia, Intestinal Obstruction.....	3	3	6
Cirrhosis of Liver.....	10	3	13
Other Diseases of the Liver .....	4		4
Simple Peritonitis .....			
Appendicitis.....	3	1	4
Bright's Disease .....	22	16	38
Other Genito-Urinary Diseases.....	5	3	8
Puerperal Diseases .....	4	1	5
Senile Debility.....	11	13	24
Suicide .....	3	1	4
Injuries.....	22	12	34
All Other Causes.....	10	13	23
<b>TOTAL.....</b>	<b>307</b>	<b>199</b>	<b>506</b>

Still-born Children—White, 15; colored, 13; total, 28.

Population of City (estimated)—White, 239,000; colored, 85,000; total, 325,000.

Death Rate per 1000 per annum for Month—White, 15.41; colored, 27.76; total, 18.68.

## METEOROLOGIC SUMMARY. (U. S. Weather Bureau.)

Mean atmospheric pressure ..... 27.95  
Mean temperature ..... 69.  
Total precipitation ..... 5.89 inches  
Prevailing direction of wind, southeast.









**UNIVERSITY OF CALIFORNIA**  
**Medical Center Library**

**THIS BOOK IS DUE ON THE LAST DATE STAMPED BELOW**

Books not returned on time are subject to fines according to the Library Lending Code.

Books not in demand may be renewed if application is made before expiration of loan period.

5m-9,'58(7015s4)4128

106434

